KPMG

Financial Statements as of 31 December 2017 and Management Report

TRANSLATION - AUDITOR'S REPORT

European Commodity Clearing AG
Leipzig

KPMG AG Wirtschaftsprüfungsgesellschaft

European Commodity Clearing AG, Leipzig

Balance sheet as of 31st December 2017

Assets

		31/12/2017	**31/12/2016**
	€	€	€
1. Cash reserve			
Central bank balances	2,340,697,895	2,340,697,895	3,017,809,340
thereof: at Deutsche Bundesbank: 2,340,697,895.11 Euro (prev. Year 3,017,809,340 Euro)			
2. Accounts receivable from credit institutions			
a) Due every day	8,698,446		16,841,497
b) Other accounts receivable	680,162	9,378,608	1,046,970
3. Accounts receivable from customers	23,970,353	23,970,353	14,197,455
4. Shares in affiliated companies	18,500	18,500	18,500
5. Trust assets	344,095,572	344,095,572	-
6. Intangible assets			
a) Acquired concessions, commercial trademarks and similar rights and values, Licenses	16,234,841		16,405,743
b) Goodwill	-	16,234,841	-
7. Property, plant and equipment	16,938	16,938	22,872
8. Other assets	14,987,319	14,987,319	11,137,515
9. Deferred expenses and accrued income	1,900,723	1,900,723	1,731,594
10. Excess of plan assets over pension liabilities	9,451	9,451	16,088
Total assets		**2,751,310,200**	**3,079,227,574**

Liabilities

		31/12/2017	31/12/2016
	€	€	€
1. Liabilities to credit institutions			
due every day	753,999,504	753,999,504	1,347,321,759
2. Liabilities to customers	1,539,472,202	1,539,472,202	1,633,485,749
3. Trust liabilities	344,095,572	344,095,572	-
4. Other liabilities	20,272,778	20,272,778	19,035,443
5. Accruals and deferrals	-	-	-
6. Deferred tax liabilities	-	-	-
7. Provisions			
a) Provisions for pensions and similar commitments	-		-
b) Tax provisions	-		-
c) Other provisions	4,535,293	4,535,293	5,449,772
8. Equity			
a) Subscribed capital	1,015,227		1,015,227
b) Capital reserve	54,300,495		39,300,495
c) Retained earnings			
Other retained earnings	33,619,129		33,619,129
d) Balance sheet profit	-	88,934,851	
Total liabilities		**2,751,310,200**	**3,079,227,574**

1. Contingent liabilities			
Liabilities from guarantees and guarantee contracts	324,387,644	324,387,644	329,547,424

European Commodity Clearing AG, Leipzig

Profit and Loss Account
for the Period from 1st January 2017 to 31st December 2017

		2017 €	2017 €	2017 €	2016 €
1.	Interest income from				
	a) Credit and money market transactions		176,263		152,640
2.	Negative interest from financial investments		9,584,531		
3.	Interest expenses		353,581	-9,761,849	7,063,345
4.	Current income from investments in affiliated companies			68,273	28,364
5.	Income from commission fees		68,880,430		75,388,479
6.	Expenses from commission fees		4,482,026	64,398,404	3,802,047
7.	Other operating income			14,092,947	8,986,048
8.	General administrative expenses				
	a) Human resources expenses				
	aa) Wages and salaries	4,741,277			4,741,383
	ab) Social insurance contributions and expenses for old-age pension and for support	1,094,916	5,836,193		979,949
	including:				
	Expenses for old-age pension EUR 601,112 (2016: EUR 263,163)				
	b) Other administrative expenses		19,136,130	24,972,323	16,950,513
9.	Depreciation, Amortization and value adjustment of intangible assets and property, plant and equipment			1,681,752	1,499,794
10.	Other operating expenses			928,420	1,282,006
11.	**Result of ordinary operations**			**41,215,280**	**48,236,493**
12.	Extraordinary expenses				
13.	Taxes on income and profit			0	41,074
14.	Profit transfer			-41,215,280	- 48,195,419
15.	**Annual profit**			**0**	**0**
16.	Profit carried forward from the previous year				
17.	Additions to retained income				
	a) to other retained income				
18.	**Balance sheet profit**			**0**	**0**

European Commodity Clearing AG, Leipzig
2017 N O T E S

The annual financial statement of European Commodity Clearing AG (ECC) for the financial year 2017 was prepared in accordance with the provisions of the German Commercial Code and of the German Companies Act as well as the Ordinance Regulating the Accounting Requirements for Financial Institutions and Financial Service Providers (RechKredV). The income statement according to RechKredV has a graded structure (form 3). The development of the individual items of the fixed assets is shown separately.

ECC is a subsidiary of European Energy Exchange AG (EEX), Leipzig. It is included in the consolidated financial statement of EEX and of Deutsche Börse AG (Deutsche Börse), Frankfurt am Main. Both are available at the German electronic gazette (www.bundesanzeiger.de). ECC is registered in the commercial register of Leipzig Local Court in section B under no. 22362.

ECC is the sole shareholder of European Commodity Clearing Luxembourg S.à r.l. (ECC Luxembourg). ECC Luxembourg is included in the commodity delivery chain (power and gas; emission allowances from April 2017 onwards). The exemption from the requirement to prepare a subgroup financial statement is used in accordance with Art. 291 Paragraph 1 HGB.

A profit-and-loss transfer agreement has been concluded by and between ECC and EEX.

1. Accounting and valuation principles

General principles

Accounting and valuations are effected in accordance with the general accounting and invoicing provisions for capital companies according to HGB in compliance with the supplementary provisions of AktG and the Ordinance Regulating the Accounting Requirements for Financial Institutions and Financial Service Providers (RechKredV). The provisions regarding large public corporations contained in Art. 340a Paragraph 1 HGB were used. The going concern principle was applied; assets and liabilities were assessed individually. A cautious assessment was effected, i.e. all foreseeable risks and losses which were incurred up until the balance sheet date were taken into account.

Cash in foreign currencies was given a value in Euros with an effect on income on the basis of the exchange rate on the balance sheet date.

Central bank balances

The balances were assessed at the nominal value.

Accounts receivable and other assets

The accounts receivable and other assets were assessed at the nominal value less required single value adjustments.

The trade accounts payable and receivable with regard to ECC Luxembourg existing on the balance sheet date were netted out since the preconditions for an offsetting situation are fulfilled. The actual offsetting situation towards ECC Luxembourg corresponds to the ECC Clearing Conditions at the time of the repayment and fulfilment of the corresponding transactions to the respective trading participants. Netted-out reporting serves to improve the clarity and comprehensibility of the annual financial statement.

Shares in affiliated companies

Affiliated companies were assessed at their acquisition costs.

Trust assets and liabilities

ECC has an account for inventory management of emission allowances at the Union registry. In accordance with the Clearing Conditions, participants in exchange trading in EU allowances (EUA) or Certified Emission Reductions (CER) submit emission allowances to the ECC account at the Union registry. The inventories of these emission allowances are booked in the registry account kept by ECC and held in custody. As the fulfilling company, ECC holds all allowances for the trading participants involved. The above situation fulfils the criteria of holding in one's own name for third-party account and, as a result, requires balance sheet reporting of the trust relationships according to Art. 6 Paragraph 1 RechKredV. On 31st December 2017, these emission allowances held in trust accounted for an inventory of 43,255,197 allowances having a market value of € 344,095,572. ECC is required to return these emission allowances held in trust at any time and without any conditions.

Intangible assets and property, plant and equipment

Intangible assets and property, plant and equipment were assessed at costs of acquisition less scheduled depreciations. Fixed assets were depreciated in accordance with the usual period of use for the company and under consideration of the period of use which is permissible from a tax perspective. The straight-line method of depreciation was used.

Minor assets (with costs of acquisition of up to € 410 (net)) acquired during the financial year were recorded as expenditure at the full amount in the year of acquisition.

Liabilities

Liabilities were shown at the amount to be paid.

Provisions

Provisions are defined for all risks, doubtful liabilities and contingent losses discernible up until the preparation of the annual financial statement. They are reported at the probable repayment amount.

Guarantees and other commitments

On the balance sheet date, there was a letter of comfort between ECC and ECC Luxembourg. More detailed information on this is provided under "Contingent liabilities".

Deferred taxes

In principle, deferred taxes are determined for the temporary differences between the commercial law and the tax law assessment of assets, liabilities as well as accruals and deferrals.

Deferred taxes are established on the basis of the combined income tax rate of 32 percent. Deferred taxes are not reported in the balance sheet by exercising the right of option according to Art. 274 HGB because of the asset surplus.

2. Notes and explanations regarding the balance sheet

Accounts receivable from credit institutions and customers

The accounts receivable from credit institutions and customers had a remaining term of less than one year.

Shares in affiliated companies

On 31st December 2017, the shareholdings according to HGB were as follows:

Name	Registered office	Share in %
European Commodity Clearing Luxembourg S.à r.l.	Luxembourg (Luxembourg)	100.00

Trust assets

On 31st December 2017, trust assets were k€ 344,096.

Intangible assets

Intangible assets are reported in the balance sheet at k€ 16,235 (previous year: k€ 16,406) as of 31st December 2017.

Property, plant and equipment

Property, plant and equipment had a book value of k€ 17 (previous year: k€ 23) on 31st December 2017. This position solely comprises business and office equipment.

Other assets

As of the balance sheet date, the other assets amounted to k€ 14,987 (previous year: k€ 11,138). This amount essentially consists of accounts receivable from affiliated companies for clearing services (k€ 5,145) and outstanding accounts receivable from nomination and delivery (k€ 7,404).

Deferred expenses and accrued income

Expenses before the balance sheet date which constitute expenses for a certain period after this date are, in principle, reported as “deferred expenses and accrued income” (ARAP).

On 31st December 2017, there were deferred expenses and accrued income of k€ 1,901 (previous year: k€ 1,732).

Excess of plan assets over pension liabilities

The excess of plan assets over pension liabilities of k€ 9 (previous year: k€ 16) results from offsetting of pension provisions with corresponding covering assets.

On 31st December 2017, the commercial law settlement amount of the underlying pension provision was k€ 127 (previous year: k€ 117). This resulted in interest expenses of k€ 5 for the 2017 financial year under consideration of the payments made in the amount of € 0. For disclosure under commercial law, an interest rate with a residual term of 15 years was selected. As a result, the actuarial interest is 3.68% (average interest rate for 10 years; previous year: 4.01%) and 2.80% (average interest rate 7 years; previous year: 3.24%) for the commercial balance sheet assessment.

The balance which is calculated as the difference between the recognition of provisions discounted by the average market interest rate of the past ten years and the recognition of provisions discounted by the average market interest rate of the past seven years is k€ 14. According to Art. 253 Paragraph 6 HGB, this amount is excluded from distribution.

The asset value of the reinsurance policy was compounded by interest of k€ 3 in the 2017 financial year and was k€ 137 on the balance sheet date (previous year: k€ 134). The costs of acquisition of the cover assets were in line with the fair value.

Liabilities to credit institutions

The existing liabilities to banks are due on a daily basis.

Liabilities to customers

The liabilities to customers are due on a daily basis.

Trust liabilities

In parallel with the trust assets, there were trust liabilities of k€ 344,096 on 31st December 2017.

Other liabilities

On the balance sheet date, there were other liabilities of k€ 20,273 (previous year: k€ 19,035). These essentially comprise accounts payable to shareholders of k€ 13,575 (previous year: k€ 13,935) from profit-and-loss transfer as well as from sales tax, liabilities to affiliated companies of k€ 5,561 (previous year: k€ 2,889), e.g., for open items from nomination and delivery and trade accounts payable of k€ 3,298 (previous year: k€ 1,849).

There were no liabilities with a remaining term of more than one year.

Provisions

	31/12/2017 k€	31/12/2016 k€
Outstanding invoices	3,045	3,239
Personnel liabilities	1,326	2,003
Supervisory Board emoluments	92	95
Legal risks and auditing costs	53	94
Other provisions	20	19
Total	**4,536**	**5,450**

The personnel provisions essentially comprise bonus payments for the past financial year.

Interest rates of 2.79% (6-year period of retention of documents) and of 3.30% (10-year period of retention of documents) were used for the calculation of the provision regarding the obligation to retain business documents.

Equity

On the balance sheet date, the equity of ECC was unchanged and amounted to € 1,015,227. It was divided into 1,015,227 bearer share certificates.

On 31st December 2017, the capital reserve amounted to k€ 54,300 (previous year: k€ 39,300). In March 2017, the capital reserve was increased by k€ 15,000.

The other retained income amounted to k€ 33,619 (previous year: k€ 33,619). This included the provision according to EMIR article 45. This provision was increased by k€ 2,500 as a result of reclassifications from other retained income in 2017. As a result, it was k€ 10,000 on the balance sheet date (previous year: k€ 7,500).

3. Notes and Explanations regarding the Profit-and-Loss Account

The interest income as well as the income from commission fees and the other operating income were generated exclusively in Germany, so that a breakdown according to geographical markets is dispensed with in accordance with Art. 34 Paragraph 2 Figure 1 of the Ordinance Regulating the Accounting Requirements for Financial Institutions and Financial Service Providers (RechKredV).

In 2017, interest income of k€ 176 (previous year: k€ 153) was generated. The cash collateral deposited resulted in interest expenses of k€ 9,585 (previous year: k€ 7,063), which were offset by an administrative fee charged to the clearing banks (k€ 10,285, reported under other operating income).

Income from commission fees

The commission fees of k€ 68,880 (previous year: k€ 75,388) concerned fees for clearing services by ECC. According to material criteria, the commission fees have the following structure:

Income from commission fees	**2017**	**2016**
	k€	**k€**
Derivatives Market clearing fees	34,412	44,960
Spot Market clearing fees	33,799	29,809
Annual fees and other income from clearing	669	619
Total	**68,880**	**75,388**

In the current financial year, reclassifications between the clearing fees for the derivatives market and the spot market were made. The presentation of the figures for the previous year were adjusted accordingly.

Expenses from commission fees

The commission expenses of k€ 4,482 (previous year: k€ 3,802) essentially comprise volume-dependent system expenses.

Other operating income

The other operating income of k€ 14,093 (previous year: k€ 8,986) essentially resulted from a fee charged for the management of cash collateral deposited by clearing banks (k€ 10,285) and from the provision of services for affiliated companies and shareholders and from charging-on of material costs to these (k€ 2,961). In addition, there was revenue unrelated to the accounting period of k€ 276, which largely resulted from the release of provisions.

General administrative expenses

The general administrative expenses of k€ 24,972 (previous year: k€ 22,672) include the following items:

General administrative expenses	2017	2016
	k€	k€
Personnel expenses	5,836	5,721
Wages and salaries	4,741	4,741
Social insurance contributions	1,095	980
Other administrative expenses	19,136	16,951
Expenses for services from affiliated companies	9,505	7,604
Overhead & marketing	3,572	3,724
System expenses	3,660	3,478
Consultancy services	2,399	2,145
Total	**24,972**	**22,672**

The increase in personnel expenses resulted from the increased number of employees. The increase in other expenses results from the settlement of the increased business volume.

Other operating expenses

The other operating expenses of k€ 928 (previous year: k€ 1,282) essentially comprise expenses from input tax corrections, which are due to sales that are exempt from sales tax.

4. Other Notes

Structure of collaterals

In order to cover ECC's risk in the event of the default of a Clearing Member, the Clearing Members undertake to provide the daily or intra-day collateral in cash or securities to the amount specified by ECC in accordance with the Clearing Conditions. On the balance sheet date, these were as follows:

Collateral	**31/12/2017**	**31/12/2016**
	m€	**m€**
Cash funds	2,269	2,974
Securities and book-entry securities (after haircut)	229	231
Total	**2,498**	**3,205**

On 31st December 2017, the ECC clearing fund amounted to € 252 million (previous year: € 281 million).

Other financial obligations

The other obligations are listed in the table below:

Financial obligation	**Total**	**2018**	**2019 to 2022**	**2023 to 2027**
	k€	**k€**	**k€**	**k€**
Services from affiliated companies*	9,818	9,818	0	0
System expenses/maintenance*	4,950	3,173	1,719	58
Buildings (rent)*	2,054	205	822	1,027
Vehicles	34	25	9	0
Other	1,157	594	503	60
Total	**18,013**	**13,815**	**3,053**	**1,145**

*These financial liabilities were liabilities to affiliated companies.

Contingent liabilities

ECC guarantees the trade accounts payable of ECC Luxembourg amounting to k€ 324,388 (previous year: k€ 329,547) as of the balance sheet date. These liabilities concern liabilities from power and gas deliveries existing as of the balance sheet date. These liabilities are covered by a part of the above-mentioned collateral.

Amounts excluded from distribution

On the balance sheet date, there were no amounts excluded from distribution according to Art. 268 Paragraph 8 HGB. According to Art. 253 Paragraph 6 HGB, there were amounts excluded from distribution on the balance sheet date in the amount of the difference of k€ 14.

Human resources development

In the financial year under review, on average 67 employees (previous year: 51.75 employees) were employed by the company.

Management Board

Peter Reitz, Leipzig	Chief Executive Officer (CEO)
Steffen Köhler, Oberursel	Member of the Board (COO)
Dr. Thomas Siegl, Eschborn	Member of the Board (CRO)
Iris Weidinger, Markkleeberg	Member of the Board (CFO)

In the 2017 financial year, the total emoluments of the Management Board were k€ 845 (previous year: k€ 1,172). In addition, pension expenses accounted for k€ 128 (previous year: k€ 124).

Transactions with related parties in accordance with Art. 285 Fig. 21 HGB

During the financial year under review, no transactions with related parties which were concluded subject to conditions that are not common on the market were concluded.

Fee for the auditor of the annual accounts according to Art. 285 Fig. 17 HGB

The fee for the auditor of the annual accounts was disclosed in the EEX consolidated financial statement.

Supervisory Board

The Supervisory Board has the following members:

Dr. Jürgen Kroneberg (Chairman)	Lawyer, Kampen (Sylt)
Hans E. Schweickardt (Deputy Chairman)	Chairman of the Supervisory Board, Polenergia S.A., Warsaw/Poland
Jürg Spillmann (Deputy Chairman)	Member of the Management Board, Eurex Zürich AG, Zurich/Switzerland

Heike Eckert (from 8th June 2017)	Member of the Management Board, Eurex Clearing AG, Eschborn
Roland Werner (until 8th June 2017)	Dresden
Prof. Harald R. Pfab	Managing Director, HHP Beratung GmbH, Fronreute
Vincent van Lith	Executive Director, ABN AMRO Bank N.V., Frankfurt am Main

On the balance sheet date, the ECC Supervisory Board had an auditing committee comprising all Supervisory Board members and a human resources and compensation committee consisting of the following members: Dr. Jürgen Kroneberg, Hans Schweickardt and Jürg Spillmann.

In the past financial year, the members of the Supervisory Board received emoluments of k€ 92 (previous year: k€ 95).

Leipzig, 22nd March 2018

Peter Reitz
Chief Executive Officer (CEO)

Steffen Köhler
Member of the Board (COO)

Dr. Thomas Siegl
Member of the Board (CRO)

Iris Weidinger
Member of the Board (CFO)

Development of Fixed Assets in the 2017 Financial Year

	Costs of acquisition and production					Depreciation / Amortization				Residual book values	
	1/1/2017	Additions	Disposals	Transfers	31/12/2017	1/1/2017	Additions	Disposals	31/12/2017	1/1/2017	31/12/2017
	€	€	€	€	€	€	€	€	€	€	€
1. Intangible assets	**29,242,068.59**	**1,502,554.06**	**0.00**	**0.00**	**30,744,622.65**	**12,836,325.29**	**1,673,456.10**	**0.00**	**14,509,781.39**	**16,405,743.30**	**16,234,841.26**
20500000 Costs of acquisition of concessions and commercial property rights	14,824,038.73		0.00	0.00	14,824,038.73	741,202.73	988,269.00	0.00	1,729,471.73	14,082,836.00	13,094,567.00
20500020 IT software	7,247,786.16	1,338,587.91	0.00	235,027.45	8,821,401.52	4,995,940.16	685,187.10	0.00	5,681,127.26	2,251,846.00	3,140,274.26
23700000 Advance payments on intangible assets	71,061.30	163,966.15	0.00	-235,027.45	0.00	0.00	0.00	0.00	0.00	71,061.30	0.00
20700000 Goodwill	7,099,182.40	0.00	0.00	0.00	7,099,182.40	7,099,182.40	0.00	0.00	7,099,182.40	0.00	0.00
2. Property, plan and equipment	**287,642.86**	**2,378.40**	**181,341.38**	**0.00**	**108,679.88**	**264,770.86**	**8,295.40**	**181,324.38**	**91,741.88**	**22,872.00**	**16,938.00**
21810000 Business and office equipment	217,403.46	1,579.41	177,012.75	0.00	41,970.12	212,185.46	5,335.41	176,995.75	40,525.12	5,218.00	1,445.00
21830000 Office furnishings	43,389.35	0.00	0.00	0.00	43,389.35	25,735.35	2,161.00	0.00	27,896.35	17,654.00	15,493.00
21811000 Minor assets	17,324.18	798.99	3,484.63	0.00	14,638.54	17,324.18	798.99	3,484.63	14,638.54	0.00	0.00
21812000 Compound item - minor assets	9,525.87	0.00	844.00	0.00	8,681.87	9,525.87	0.00	844.00	8,681.87	0.00	0.00
3. Shares in affiliated companies	**18,500.00**	**0.00**	**0.00**	**0.00**	**18,500.00**	**0.00**	**0.00**	**0.00**	**0.00**	**18,500.00**	**18,500.00**
26100000 Shares	18,500.00	0.00	0.00	0.00	18,500.00	0.00	0.00	0.00	0.00	18,500.00	18,500.00
	29,548,211.45	**1,504,932.46**	**181,341.38**	**0.00**	**30,871,802.53**	**13,101,096.15**	**1,681,751.50**	**181,324.38**	**14,601,523.27**	**16,447,115.30**	**16,270,279.26**

Management Report of European Commodity Clearing AG, Leipzig, for the Financial Year 2017

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1. About the Company

1.1 Business operations and corporate structure

European Commodity Clearing AG (ECC), with registered offices in Leipzig, Germany, was established in 2006 through a spin-off of the services of European Energy Exchange AG (EEX) in the field of clearing and settlement, and has evolved into the leading clearing house for energy and related products in Europe. On 31st December 2017, the company employed a staff of 70.

ECC is a credit institution and has a banking licence as a central counterparty within the meaning of Art. 1 Paragraph 1 Figure 12 KWG (German Banking Act), in conjunction with Art. 1 Paragraph 31 KWG. In addition, since 2014, ECC has had a licence to act as a central counterparty, within the meaning of the European Regulation (648/2012) on OTC derivatives, central counterparties and trade repositories (EMIR). In this function, ECC settles the trades concluded between the trading participants on the affiliated markets or registered for clearing and guarantees their fulfilment even if a counterparty defaults. Physical deliveries are settled by the European Commodity Clearing Luxembourg S.à.r.l. (ECC Lux), a wholly-owned subsidiary of ECC.

In addition to the stable settlement of the trading transactions in line with the contracts, the company's objective as a clearing house is to increase the efficiency of clearing and risk management through the integration of different market platforms, products and commodities into a uniform system. ECC provides clearing services for all markets of the European Energy Exchange (EEX), EPEX SPOT (EPEX), Powernext and Power Exchange Central Europe (PXE). In addition to this, co-operations with other exchanges outside EEX Group have been entered into since 2006. In this context, the focus is on the creation of clearing offers across markets and products in the field of derivatives and spot trading. At present, ECC co-operates with HUPX Hungarian Power Exchange Ltd. (HUPX), NOREXECO and SEEPEX.

ECC is wholly owned by EEX. In 2015, a profit-and-loss transfer agreement was concluded between ECC and EEX.

Corporate governance

As a German public limited company, ECC comprises the following corporate bodies: the general meeting, the Supervisory Board and the Management Board, each of which has its own competences. In addition, there is a risk committee as an advisory body for the corporate management (as stipulated by EMIR).

The general meeting appoints the members of the Supervisory Board and approves the activities of the Management Board as well as of the Supervisory Board.

The Supervisory Board appoints, monitors and advises the Management Board and is directly involved in decisions which are of fundamental importance to the Company. Moreover, it adopts the annual financial statement prepared by the Management Board. At present, the Supervisory Board has six members.

The Management Board (which is in charge of managing the company's operations) represents the company to the outside world. The Management Board consists of the Chief Executive Officer (CEO), the Chief Operating Officer (COO), the Chief Risk Officer (CRO) and the Chief Financial Officer (CFO). The members of the ECC Management Board also act as members of the EEX Management Board.

1.2 Strategy and control

Strategy

The strategic alignment of ECC is very much based on customer and market requirements. Its leading position as a clearing house for energy and related products in Europe and, increasingly, also in other commodities, which is characterised by the far-reaching international network of Clearing Members as well as the close interconnection with the partners relevant for the physical settlement of the value of goods (e.g. transmission system operators), confirms the success of this model. Integrated clearing, i.e. integrating several market platforms, products and commodities in a uniform risk management and settlement system, forms an element in the corporate strategy for the further development of business. In this context, ECC primarily focuses on the following fields of subjects:

- Maximising the benefit of clearing for the participants across partner exchanges, markets and products,
- Integration of further partner exchanges in order to expand the trading partner base
- Expansion of the diversification of the business model for the clearing house and
- Establishment of clearing services as an important market element in connection with the physical settlement of energy trading transactions.

As a result of the significant increase in legal requirements, ECC increasingly focuses on regulatory subjects. As a result of the close monitoring and of the contributions made to the regulatory debate, targeted measures can be taken early on in order to ensure competitiveness and take account of as well as implement customer requirements.

ECC pursues the long-term aim of becoming a leading global clearing house for clearing and settlement of exchange and over-the-counter spot and derivatives transactions in the commodity segment in order to provide customers with one-stop-shop services enabling them to benefit from uniform processes, one set of contracts as well as cross-commodity margining. The focus is, in particular, on the risk strategy. In addition to adequate collateralisation of the default risk, clearing efficiency and, in particular, margin efficiency are especially important.

Corporate management

ECC essentially uses the parameters of commission income, costs, EBT, and liquidity to manage the Company. Moreover, the risk parameters according to EMIR are also essential control parameters for the clearing house.

The revenue generated by ECC is influenced, in particular, by income from commission fees (transaction and annual fees) and other operating income. As regards expenses, we differentiate between commission expenses, general administrative expenses, other operating expenses and depreciations. While provision expenses are variable in character, i.e. they correlate with the amount of the transaction fees, the further expense items have the character of fixed costs (cf. “Earnings situation” for details).

Approximately 85 percent of the ECC expenses are independent of turnover. As a result, ECC can settle additional business volumes without a significant increase in costs because of economies of scale and scope. Nonetheless, a decline in business volumes would have a direct impact on the profitability of ECC.

1.3 Research and development

As a service company, ECC does not engage in any research and development activities, which are, e.g., carried out by manufacturing companies. New developments of products and services for the year 2017 are addressed under “Development of business” and with a view to the future in the “Risk and opportunity report”.

2. Economic development

2.1 Macro-economic and industry-specific framework conditions

The macro-economic and industry-specific framework conditions which are decisive for the business activities of the companies within EEX Group and, in particular, for the development of the clearing volumes resulting from these are briefly outlined below.

Essential factors influencing the transaction fees

The amount of the transaction fees is determined by three essential influencing factors: Apart from the size of the overall market, the transaction revenue also depends on the market share and on the fee structure. The market share and the fee structure are monitored in the framework of the implementation of the group strategy and of corporate management with a focus on strengthening the competitive position of EEX Group and positioning the group as a global commodities trading platform. By contrast, the size of the overall market cannot be influenced by ECC and essentially depends on the following factors:

- Physical energy consumption and market maturity (churn rate)
- Price development and volatility on the energy markets
- Regulatory framework conditions

Physical energy consumption and market maturity

According to a joint analysis of Agora Energiewende from Germany and Sandbag from the United Kingdom, physical energy consumption in Europe has grown the third year in a row and, in 2017, it was around 0.7 percent higher than in the previous year. The development of consumption continued to be driven, essentially, by the lasting positive economic development in Europe, which led to increases in consumption in spite of energy savings and a more efficient use of energy. In this process, for the first time ever, in the European Union, more power was generated from wind, solar power and biomass than from hard coal and lignite taken together. The energy mix consisted of 44 percent fossil fuels, 30 percent renewable energy and 26 percent nuclear energy. In Germany, energy consumption increased by 0.8 percent in 2017 as against the previous year according to calculations by the Working Group on Energy Balances.

During the past financial year, the Europe-wide consumption of natural gas also increased with growth being driven, in particular, by the increased use of natural gas in the energy sector. According to the quarterly report of the EU Commission on the European gas markets, gas consumption within the European Union increased by 6 percent in the first quarter of 2017. In the following two quarters, this increase even reached 11 and 14 percent respectively as against the same quarters in the previous year. Figures for the fourth quarter were not yet available at the time at which this management report was prepared.

The maturity of the individual energy markets is measured with the help of the so-called churn rate. This parameter indicates how often a mega-watt hour of power or natural gas is traded on the markets before it is actually physically delivered. This means it corresponds to the proportion between the total trading volume and energy consumption. The higher the churn rate is, the higher the total trading volume and the liquidity of the market and, hence, its market maturity are.

According to the quarterly report of the EU Commission on the European energy markets, the churn rates on almost all European energy markets declined in the first quarter of 2017 compared with the first quarter of 2016 as a result of the declining trade volumes. The churn rate of the German power derivatives market rose to 14.3 as against the same quarter in the previous year, although it clearly missed the record of 19.0 achieved in the fourth quarter of 2016. However, Germany remained the most mature market. All other European power derivatives market areas had a churn rate of, at a maximum, 5.0. On the French power derivatives market, the churn rate fell by one half to 1.4, while, in Italy, it was around 1.5 and in the United Kingdom it was 4.0. The declining trend in the churn rate did not continue in the second quarter of 2017 with churn rates remaining largely stable. In the gas market segment, the Dutch TTF (Title Transfer Facility) market area had the highest churn rate at 57.1 in 2016, followed by the British NBP (National Balancing Point) market area at 22.1. As a result, these two hubs were the only ones with a rate of more than 10. In 2015, the values were 47.7 for TTF and 28.5 for NBP. Churn rates for the entire year 2017 were not yet available at the time at which this management report was prepared.

Price development and volatility on the energy markets

The price decline observed in previous years did not continue in the 2017 financial year. While, in 2016, a price of only € 28.98 per MWh was paid on an annual average on the German day-ahead market for power, the price increased to € 34.19 per MWh in 2017. Market participants who purchased base load power for 2018 on the derivatives market (Phelix Baseload Year Future), on average, paid € 32.05 per MWh (2016: € 26.58 per MWh). The monthly EGIX gas price index had an average price level of € 17.11 per MWh during the reporting year and was, hence, 21 percent higher than in the previous year (€ 14.13 per MWh).

In general, the 2017 financial year was shaped by lower volatility, i.e. less severe price fluctuations, in particular on the power derivatives markets. Because of unscheduled production downtime as a result of inspection works ordered at short notice for approximately one third of the French nuclear power plants in the autumn and winter of 2016, significant price increases were observed on the power derivatives markets towards the end of the previous year. This trend did not continue in the 2017 financial year, which was, instead, shaped by increased reserve on the part of the trading participants. The lower range of fluctuations in commodity prices reduced the need to adjust hedging positions and, as a result, led to lower trading activities overall.

Regulatory framework conditions

In 2017, the energy markets were again shaped by adjustments of existing and discussions regarding the introduction of new regulatory measures. While, at a federal level, no new legislative initiatives were implemented because of the federal elections in 2017, the debate at a European level was dominated by the "Clean Energy Package". Apart from this, the focus was on the implementation of measures which had already been approved. The most important projects for energy trading are or were:

- The design and national implementation of the revised EU Markets in Financial Instruments Directive (abbreviated: MiFID II) and the appertaining EU MiFIR regulation.
- The further development of the power market design at a European level in the framework of the "Clean Energy Package".
- The agreement between the Federal Network Agency and E-Control regarding the introduction of congestion management measures at the German-Austrian border and, hence, the division of the German-Austrian pricing zone into two market areas as well as the continued discussion regarding possible further splits.
- The institutionalisation of the role of the exchanges in market coupling with a guideline on capacity allocation and congestion management (CACM).

The revised **EU Markets in Financial Instruments Directive (MiFID II)**, which took effect on 3rd January 2018, significantly changes the rules for trading in commodity derivatives. The general exception for commodity derivatives, which has applied so far, was cancelled and, hence, replaced by a so-called "ancillary activity exemption". As a result, only trading participants with relatively low trading activities will be exempt from the MiFID II requirements. This could lead to a situation in which a number of energy traders might be forced to reduce their trading activities accordingly (with reference to their other activities). Moreover, this process can be reinforced from 3rd January 2018 with position limits on the commodity derivatives traded on energy markets. As a result, as of that time, caps for holding of derivatives which must not be exceeded either by individual companies or by corporate groups cumulatively, apply. In consequence, trading participants would have to reduce positions and restrict trading activities if required in the event that these limits are exceeded. In addition to this, trading activities which are carried out at an Organised Trading Facility (OTF) – a new trading platform category introduced under MiFID II – will be exempt from MiFID II. Compared with this, similar transactions which are concluded at a regulated market or on an exchange are part of the scope of application of

MiFID II. We cannot rule out that such unequal regulatory treatment might entail shifts in volumes from regulated markets to OTFs. Concurrently, however, there are also first trends on the part of the trading participants to move trading participants to regulated markets as a result of MiFID II. In the framework of the revised MiFID II, there is also an additional requirement for so-called position and transaction reporting which has to be prepared by the exchanges with the support of the trading participants. On account of regulatory uncertainty and delays in the process, implementation problems are possible, in particular, at the beginning of 2018.

While in Germany important strategic decisions regarding the future **power market design** were taken with the new electricity market law in the previous year, the debate is well underway at a European level. In the framework of the so-called **Clean Energy Package** the European Commission submitted proposals regarding the further development of the power market. In addition to fundamental questions regarding market design, such as, e.g., securing free and unobstructed pricing, these also include aspects of border-crossing trading, the promotion and integration of renewable energies as well as questions of control – in particular with a view to ACER. In the framework of the regular EU legislation procedure, both the European Parliament and the member states are now looking into these proposals. On account of the abundance of new provisions, concrete results and legally binding decisions can be expected, at the earliest, during 2018.

The debate regarding the **re-structuring of bidding zones** on the power market as a result of grid congestion and the insufficient grid expansion has reached a critical phase. In this process, the Federal Network Agency and E-Control agreed to introduce measures for the introduction of congestion management at the German-Austrian border from October 2018 on. The transmission system operators were requested to make preparations, which, as a result, translates into a split of the current joint price zone. At present, talks regarding the implementation are underway with the transmission system operators and power exchanges concerned. In parallel with the implementation, lawsuits are pending and, at a European level, processes are underway regarding the far-reaching re-structuring of price zones with possible effects on this price zone as well as others. As seen from the perspective of EEX Group, it must be ensured that any market split has the lowest possible effect on the market.

Originally, the **guideline for capacity allocation and congestion management (CACM)** was designed to facilitate a stronger border-crossing cooperation between the respective transmission system operators in the form of a technology and operations guideline. In 2015, this took effect as a guideline and, essentially, pursues three aims:

- Introduction of uniform day-ahead and intraday market coupling with the help of harmonised provisions for capacity calculation, congestion management and power trading
- Promoting competition at all levels of the value chain and creating the necessary framework conditions
- Optimum use of the transmission infrastructure

For the exchanges, the CACM Regulation is of such outstanding importance, in particular, because it introduces a new concept: that of the “nominated electricity market operator” (NEMO). This helps to institutionalise the role of the exchanges in the context of market coupling – a role which they have only assumed factually so far. In other words, it formulates and validates the roles and tasks in legal terms. The concrete rules, however, are also submitted to a review and developed further, if required. As a result, new rules for the cooperation between NEMOs and the transmission system operators are introduced and a system is created which also permits NEMOs to actively operate in other member states. Specifically, in future, exchanges will be regulated by the national authorities in the context of the CACM Regulation in the fields of activity affected by it. This will have a lasting influence on the relationship of EPEX with the regulators.

The reimbursement of the costs generated upon exercising of the market coupling operator function (“MCO function”) which is not guaranteed constitutes another risk: NEMOs should be entitled to the coverage of the costs incurred by them provided these were incurred efficiently and are adequate as well as proportionate. The MCO function is EU regulated; however, the amount of the costs to be reimbursed is ultimately determined by the respective regulatory authority at a national level. Before the CACM Regulation took effect, the costs were contractually determined and guaranteed by the respective transmission system operator. Because of the new provision in the CACM Regulation, EPEX incurs potential losses in the seven-digit range.

While, in principle, trading markets are subject to the influence of the political environment, the **uncertainty regarding the stability of political framework conditions** has increased recently. This, e.g., included the United Kingdom’s Brexit decision which raises complex regulatory questions regarding financial market regulation as well as energy and climate policy. The first effects have already been observed in the European emissions trading scheme which temporarily threatened a cancellation of all new certificates auctioned off by the United Kingdom. As seen from the perspective of the market, it remains to be seen in how far these political decisions regarding changes in energy and climate policy and international trade relations will also have an effect on the energy markets. The concrete effects of the individual regulatory measures on the markets of EEX Group and, in line with this, on the ECC clearing volume as well as on the activities of the trading participants are explained in more detail in the “Risk and opportunity report”.

2.2 Development of business

The development of business of ECC as a service provider for clearing and settlement is connected to the success of the partner exchanges affiliated with it. ECC, in return, has a positive effect on its partner exchanges by connecting new exchanges in the framework of the multi-exchange approach and by expanding its service portfolio. The development of the corresponding markets is outlined briefly below.

EEX Power Derivatives GmbH (EPD)

In the 2017 financial year, trading volumes on the EEX Power Derivatives GmbH power derivatives market declined by 29 percent as against the previous year. Hence, the business of EPD as part of EEX Group declined for the first time ever. The historically high volatility in the second half of 2016 led to restraint among the trading participants and, in particular, among the financial market players, from the beginning of 2017 bringing about a decline in the overall market volume. At the same time, the year 2017 was shaped by regulatory uncertainty on account of the pending split of the German-Austrian bidding zone. Because of the planned split of the bidding zones, the Phelix-DE/AT Futures, which have formed the EPD core product for many years, no longer provide complete hedging against price risks in the German and Austrian market areas which will probably be separate from October 2018. EPD responded to the announced split of the price zone with new products and gradually introduced new power derivatives contracts with financial settlement for the German and Austrian market.

Overall, a volume of 2,773 TWh was traded on the power derivatives market (previous year: 3,903 TWh).

On the German power derivatives market, a volume of 2,003 TWh (previous year: 2,854 TWh) was traded in 2017. This corresponds to a 30-percent decline as against the previous year. The share of German futures in the overall EEX Power Derivatives GmbH power derivatives market was significant at 72 percent and is, hence, at the level of the previous year.

The volume traded on the power derivatives market in France also declined and was 283 TWh in the reporting year. This corresponds to a decline of 40 percent. Based on the overall market volume, the French power volume is the second biggest European market after Germany. During the financial year, the market share declined slightly from 33 to 28 percent, while the overall market shrank significantly by more than 30 percent.

On the Italian power derivatives market, a total volume of 396 TWh was recorded in 2017 corresponding to a share of 14 percent in the overall volume of the EEX Power Derivatives GmbH power derivatives market (previous year: 482 TWh, 12 percent). During the financial year, the market share was expanded from 63 to 74 percent – albeit in a shrinking overall market environment.

In 2017, EPD again supported growth on the power derivatives market by introducing new products. For example, further short-term products (day and weekend futures) were introduced for the Swiss, Czech and Hungarian market areas. As a result, EPD contributes to strengthening liquidity in these market areas. In addition, these product launches pursue the strategic aim of expanding the product portfolio for all market areas offered and rounding out the offering in European energy trading.

In response to the lasting challenges of the energy turnaround, EPD, e.g., is continuously working on innovations in the framework of product development in order to fulfil the market's requirements. For example, with the German Intraday Floor Future a third specific "Energiewende" product was introduced. In addition, initial trading transactions in wind futures were recorded.

EPD still faces strong competition on the power derivatives market without any changes. More than one half of trading still takes place via over-the-counter broker platforms whose market share even increased slightly in 2017 compared with the previous year. The remaining trading volume is distributed among several energy exchanges. Apart from EEX, these essentially comprise the global exchange operators NASDAQ Commodities (NASDAQ) and Intercontinental Exchange (ICE) as well as smaller national energy exchanges. In the competition among these exchanges, EEX Group was able to prevail, in particular, as regards the main competitor NASDAQ and expanded its leading position. In spite of new market entrants and an, in part, aggressive pricing policy, the competitor exchanges were not able to significantly improve their market position.

EPEX SPOT SE (EPEX)

The EPEX power spot exchange was also able to again increase its trading volumes compared with the previous year. At 535 TWh, the volume settled by ECC in 2017 rose by 8 percent compared to the previous year (493 TWh).

Even though, compared with the day-ahead markets, absolute volumes are still low, the intra-day markets continued to gain in importance in 2017. This trend was primarily due to the increasing importance of digitalisation and the fluctuating renewable energies for the power supply, which results in an increased demand for short-term balancing options for the balancing group managers. To give them the possibility to respond to short-term developments in power generation and consumption, the lead-time between trading and delivery of German power contracts was reduced from 30 to 5 minutes during the financial year. Moreover, continuous 30-minute trading of power spot contracts for the French, German and Swiss intraday market was launched during the reporting year. This permits local and implicit border-crossing trading at the corresponding borders and offers the customers a further instrument for controlling power trading more flexibly and efficiently.

The integration of APX into EPEX was promoted further in the 2017 financial year. For example, the day-ahead markets in the Netherlands and in Belgium were migrated to the EPEX systems in the first quarter of the year. The migration of the remaining day-ahead and intraday markets in the United Kingdom is planned for the first and second quarter of 2018. In addition, EPEX continued auctioning of capacity certificates for power generation in France (launched in 2016) with three auctions in 2017.

Within the power spot business field, EPEX directly competes with other spot exchanges. In the United Kingdom, short-term trading of power is also offered by N2EX, a subsidiary of the second biggest European power spot exchange, the Norwegian Nord Pool Spot, in addition to EPEX. In 2017, N2EX had a market share of 63 percent, while EPEX had a market share of 37 percent. Moreover, Nord Pool Spot also operates in the German market area with an offering for the intraday market; by now, Nord Pool Spot has also been licensed for all other decisive market areas of EEX Group. Generally, competition has intensified significantly because of the further liberalisation of the market and changes in regulation (CACM). A further intensification has to be expected.

Powernext SA (Powernext)

The partner exchange Powernext, which operates the PEGAS gas trading platform, developed positively in the 2017 financial year and, as a result, expanded its position as the second mainstay of revenue, in addition to the power markets. The growth on the spot market, in particular, in which two-digit growth rates were achieved in almost all market areas, contributed to the overall growth of the business field. In this context, the increase in volumes was essentially based on gains in market shares in an overall market which increased only slightly. On the derivatives markets in Germany and France, in contrast, the decline of the overall market lead to declining trade volumes because of lower volatility combined with declining market shares. Overall, the volumes and, hence, the sales revenue on the gas derivatives market grew nonetheless.

In total, eleven market areas (GPL - Germany, NCG - Germany, TTF - Netherlands, PEG Nord - France, TRS - France, NBP – United Kingdom, ZEE - Belgium, ZTP - Belgium, PSV – Italy, CEGH – Austria and GPN - Denmark) were offered for trading on the PEGAS platform operated by Powernext during the year under review. In the 2017 financial year, the gas markets were expanded as of the end of the year through the migration of the Czech gas contracts of PXE to the PEGAS platform.

On the spot market, 826 TWh of natural gas were traded on Powernext and settled by ECC in 2017. This corresponds to a growth rate of 20 percent as against the previous year (686 TWh).[1] The cleared volume on the derivatives market was 1,151 TWh. During the previous year, a volume of 1,097 TWh was cleared; hence, this market grew by 5 percent during the year under review.

Moreover, the gas products tradeable via the PEGAS trading platform were also expanded in 2017. For example, new geographic spread products with the existing Dutch, German and Austrian products were implemented. In addition to the geographic expansion, measures for the further improvement of the offering and, hence, an increase in customer benefit were also taken within the existing product portfolio. Among other measures, a new European spot market index (EGSI) was introduced and the use of the existing indices for the derivatives market was harmonised in the second half of the year. Moreover, PEGAS was nominated by the Dutch transmission system operators for the calculation of the so-called “Neutral Gas price” for the Dutch TTF Hub, which is to be implemented in the first quarter of 2018. Furthermore, so-called congestion products were implemented for the French PEG Nord and TRS delivery areas offering transmission system operators the possibility to enhance their management of possible grid congestion.

The competitive environment in the European natural gas markets is similar to that of the power derivatives markets: The predominant part of natural gas trading takes place via over-the-counter broker platforms. The remaining share of trading is distributed between Powernext, the exchanges of CME Group and ICE as well as smaller national energy exchanges. While Powernext is the exchange with the highest trading volumes on the spot market, ICE accounts for the biggest market share on the exchange derivatives markets. There is growth potential for Powernext, in particular, on account of the fact that the Dutch market area replaced the British market area as the biggest market in 2015. While the shrinking British market is dominated by ICE and brokers, Powernext can benefit from growth and a shift in trading activities on the Dutch market.

[1] Difference to last year’s report due to the consideration of figures for CEGH and GPN

Global Environmental Exchange GmbH (GEEX)

Thanks to growing trading volumes of emission allowances both on the primary and secondary market, trading in emission allowances which is organised by GEEX was able to continue its growth strategy. While the primary market auction volumes are determined by the EU, GEEX benefitted from a growing overall market on the secondary market combined with constantly growing market shares. In 2017, an increase of volumes of, in total, 45 percent was achieved as against 2016. On the spot market for emission allowances, volumes grew by 31 percent as against the previous year. In this respect, a growth rate of 33 percent was recorded on the primary market, while the growth rate on the secondary market was 14 percent. Volumes on the derivatives market rose by 83 percent year-on-year.

On behalf of the EU commission, new emission allowances for all member states are introduced to the market via auctions (primary auctions). The volumes are determined in advance and auctioned separately for Germany, the United Kingdom and Poland, while the auctions for the remaining 25 member states are carried out together. The auctions for the United Kingdom are carried out by ICE, while GEEX provides the auctions for all other EU member states. The respective contracts on which this is based were extended by up to another five years in 2016.

In the financial year under review, EEX concluded a cooperation agreement with IncubEx, which, along with its subsidiaries in North America and Europe, specialises in the development of financial products and services, in order to further expand liquidity in environmental products and the appertaining commodities. In the framework of the cooperation, the number of trading participants actively operating on the exchange is to be increased and a global trading network is to be developed. This is aim is pursued by the international network of exchanges and clearing houses of GEEX expanding its trading and clearing offer with contracts designed and developed by IncubEX. In this process, the cooperation partners intend to focus on the European and US-American markets initially.

European Energy Exchange AG (EEX)

In 2017, the EEX product portfolio comprised coal, guarantees of origin and freight futures. Trading in guarantees of origin did not generate any volumes and was removed from the product portfolio at the end of the year. Moreover, no volumes were recorded on the coal market.

Overall, 35,435 contracts were cleared in the freight segment in 2017 (180 percent growth year on year). As a result, the freight products formed the most profitable product group of EEX. In 2017, EEX again continued the expansion of its product and service offering. In particular, the transfer of the open positions in Dry Bulk Freight contracts from 2018 to 2024 from the British clearing house LCH to ECC ensured a more comprehensive portfolio and a broader customer base in connection with higher liquidity in the freight sector. Moreover, the EEX Trade Registration offering was expanded with futures on wood pellets, which are used for energy generation and form a coal substitute.

Agricultural Commodity Exchange GmbH (ACEX)

In the 2017 financial year, the partner exchange ACEX was able to generate growth. While trading in futures on processing potatoes declined slightly, trading in dairy futures (whey powder, butter and skimmed milk powder) contributed to growth. Trading in futures on hog and piglet indices came to a standstill so that these two products were removed from the product portfolio. Overall, 65,453 contracts were cleared by ECC during the reporting year. This corresponds to an increase of 17 percent as against the previous year (55,838 contracts).

HUPX Hungarian Power Exchange Ltd. (HUPX)/Hungarian Derivative Energy Exchange (HUDEX)

In 2017, the Hungarian power derivatives market was lower than in the previous year (-29 percent); however, it recovered somewhat in the fourth quarter of the year. HUPX responded to the trading participants' requirements and the changed regulatory framework conditions with the expansion of the trading hours from November 2017 and the switch of the physically settled futures to financial contracts, which can be traded on the regulated Hungarian market, HUDEX, from 2nd January 2018. At the same time, it offers trading participants the possibility to have financial futures positions fulfilled physically via the Hungarian spot market.

Compared with the previous year, the volumes on the Hungarian power spot market developed positively (5 percent). A slight decline at the end of the third quarter was offset in the fourth quarter.

In January, the HUPX intraday market began the year with a promising increase in volumes and then stabilised above the level of the previous year following a weak first half of the year overall.

Power Exchange Central Europe a.s. (PXE)

The PXE partner exchange also generated growth rates in the 2017 financial year. All in all, 61 TWh were cleared on the PXE spot and derivatives markets (of which derivatives market: 52 TWh, spot market: 9 TWh). This corresponds to a growth rate of 42 percent as against the previous year (43 TWh).

At 57 TWh, the trading volume registered on the power market was 42 percent higher than in the previous year (40 TWh). At 41 and 35 percent respectively, the Hungarian and Czech financial futures accounted for the biggest share in the power futures traded. On the gas market, 4 TWh (previous year: 3 TWh) were cleared in Czech gas contracts in the year 2017.

The PXE power derivatives products were migrated to the EPD rules and regulations on 15th June 2017. In December 2017, the gas products were migrated to the PEGAS platform and the Powernext rules and regulations.

NOREXECO AS (NOREXECO)

With NOREXECO, ECC cooperates with an exchange partner offering commodity derivatives for pulp and paper (recycling paper) for trading. Compared with the previous year, the traded volumes increased significantly (209 percent). In total, 194,500 t were traded in pulp and paper contracts. In 2018, this development is to be additionally strengthened through the opening hours which were extended in November 2017 as well as the introduction of further products.

South Eastern European Power Exchange (SEEPEX)

As against the previous year, SEEPEX was able to achieve an increase in traded volumes (59 percent), essentially, supported by record results in May and December 2017. The positive development was, e.g., supported by the introduction of block contracts in March 2017 and the acquisition of additional trading participants.

Further developments

New services

In 2017, ECC, together with EEX, was able to acquire KB TECH Ltd. as a new, independent STP service provider and to open a further registration channel for transactions arranged by brokers. In addition to the possibility of registering power, emissions and freight transactions on EEX, the so-called "KB Portal" offers a number of additional services, such as a historical trade search, a trade analysis function as well as the possibility to register spread transactions.

In addition to this and under consideration of the growing importance of STP Trade Registration, ECC also implemented a technical solution for managing possible financial risks from Trade Registration transactions. The STP Risk Limit Services enables Clearing Members to set and administrate financial limits for Trade Registrations of their Non-Clearing Members, proprietary trading as well as for customer transactions. As a result of the limit set, the maximum possible increase in the margin to be provided which is caused by STP transactions on a given trading day can be effectively limited.

With the take-over of the positions in Dry Bulk Freight FFA previously kept at LCH Ltd., ECC has made an important contribution to the EEX Group strategy of sustainably expanding into globally traded markets. Following the transfer of in total 31,220 contracts, EEX Group was able to significantly expand its customer base and the depth of liquidity in the freight sector and, as a result, it now covers the entire range of the most frequently traded Dry Bulk Freight contracts both as a trading platform and in clearing.

In this connection, customers can now choose between EUR and USD as their margin currency and provide cash collateral in USD at ECC.

New cooperations and product categories

In 2017, together with the two Irish NEMOs EirGrid and SONI Ltd. as well as EPEX SPOT, the establishment of a joint exchange and clearing solution for the Irish power market was further promoted and the so-called market trial, an intense testing phase involving the future market participants was launched. The Irish power spot market is scheduled to be commissioned in May 2018.

In addition, ECC and the Allocated Bullion Exchange (ABX) announced that they will cooperate in future. In this respect, there are plans for ECC to launch clearing services for precious metals for the first time ever in 2018.

In the energy sector, with the help of ECC Lux and Belpex, ECC now provides physical settlement of gas and power contracts for 25 transmission system and hub operators in 13 countries. Moreover, with regard to the settlement of emission allowances, guarantees of origin and French capacity guarantees ECC is connected to the corresponding registries for safekeeping and transferring these certificates. This forms an important USP in the competition with other clearing houses.

Regulation and margining

ECC supports active and uniform Europe-wide regulation for clearing houses and actively cooperates with the supervisory authorities.

In 2017, ECC continued to further optimise the efficiency of its risk management instruments. ECC intends to use the Eurex “Prisma” clearing system, a portfolio-based margining concept, in future. This new standard will gradually replace the existing margining methodology based on SPAN. Based on this sophisticated methodology, Prisma will improve the cross-margining between products and asset classes.

Participants

On the balance sheet date (31st December 2017), ECC had in total 23 Clearing Members (19 General Clearing Members and four Direct Clearing Members) and, as a result, it remained unchanged as admitted, while one member resigned. Moreover, eleven participants were admitted to the Direct Clearing Model (DCPM). This model which was introduced in September 2016 grants trading participants direct access to trading and clearing on the spot markets without requiring them to establish a connection to a Clearing Member. By the end of the year, the number of clearing participants (including Non-Clearing Members) had increased to 516 (previous year: 505).

2.3 Earnings situation

For ECC the development of the individual markets of the partner exchanges plays an important role and governs the earnings situation of the clearing house. This section covers the profit and loss account of ECC.

In the 2017 financial year, the interest result was k€ -9,762 and, hence, significantly lower than in the previous year. As before, the continued negative result is due to the interest rate policy of the European Central Bank. The negative interest on any deposits at the Central Bank exceeding the minimum reserve determine the ECC interest result. Combined with the stringent regulatory investment guidelines, the current interest rate situation prevented alternative investment options for ECC in the course of the year. In 2017, ECC generated interest income from the interest for loans granted to ECC Lux during the financial year.

At k€ 68,880, the income from commission fees consisting of transaction and annual fees (share of annual fees in commission fees: 0.5 percent) was k€ 6,508 or -9 percent lower than in the previous year (k€ 75,388).

In spite of a market slump, the power derivatives market again proved to be the mainstay of revenue in 2017; however, its share in income from commission fees declined to 37 percent (previous year: 48 percent). Compared with the previous year (k€ 36,375), sales from the settlement of power derivatives transactions declined by 30 percent to k€ 25,320.

The income from commission fees generated on the natural gas spot and derivatives market increased significantly from k€ 19,626 to k€ 22,359 (14 percent). In the financial year under review, it accounted for a share in clearing revenue of 32 percent (previous year: 26 percent). As a result, the natural gas spot and derivatives market forms the second-biggest revenue component of ECC.

Income from commission fees from clearing of the power spot market rose from k€ 16,603 to k€ 17,757 by 7 percent and, at 26 percent, it formed the third biggest revenue segment of ECC.

In the 2017 financial year, the revenue from clearing of emission allowances rose to k€ 934. As a result, it increased by 43 percent compared with the previous year (k€ 652). As in the past, it still contributes a share of one percent to the ECC income from commission fees.

The agriculturals market clearing revenue rose to k€ 171 by 27 percent during the year under review (previous year: k€ 135).

Clearing of the Hungarian power spot and derivatives market of HUPX also developed positively. Overall, an income from commission fees of k€ 677 was generated (previous year: k€ 662).

In 2017, the cooperation with PXE resulted in income from commission fees of k€ 834 and exceeded the previous year’s result by k€ 183.

Moreover, EEX (k€ 85), NOREXECO (k€ 39) and SEEPEX (k€ 34) also generated income from commission fees.

In 2017, expenses from commission fees increased from k€ 3,802 to k€ 4,482 as against the previous year. These expenses primarily consist of expenses for market makers on the gas market and were higher than in the previous year because of higher income from commission fees in 2017. The increase in market maker expenses is due to higher shares and/or increased incentivisation programmes.

The ECC commission result (income from commission fees less expenses from commission fees) declined by k€ 64,398 (10 percent) compared to the previous year. The development of results in the financial year 2017 was driven by the decline in the clearing revenue on the EPD power derivatives market to a decisive degree.

During the year under review, the other operating income increased significantly and, at k€ 14,093, it reached a value 57 percent higher than in the previous year (k€ 8,986). Among other aspects, this position included income from services to affiliated companies, the securities management fee as well as the administrative charge for cash collateral which increased significantly in 2017 in line with the increase in interest expenses as well as the refunding of project costs by the partner exchanges.

Compared with the previous year, general administrative expenses rose by 10 percent to k€ 24,972 (previous year: k€ 22,672). Human resources expenses increased only slightly from k€ 5,721 in the previous year to k€ 5,836. This development reflects, on the one hand, the increase in personnel (2017: 70; 2016: 58 employees) and, on the other hand, lower expenses for profit shares for employees and the management board on account of lower profits than in the previous year. Other administrative expenses rose by 13 percent to k€ 19,136 as against the previous year (previous year: k€ 16,950) and were driven by higher expenses, amongst others, for adjustments of clearing and margining systems, for consultancy as well as for services from affiliated companies.

At k€ 1,682, depreciation and amortization was 12 percent higher than in the previous year (k€ 1,500). This increase is primarily due to the fact that the acquisition of the APX clearing business had an effect on the full year for the first time. Further amortization results from investments in the settlement system for the spot market as well as other clearing systems.

In 2017, the other operating expenses declined to k€ 928 (previous year: k€ 1,282), which was due to a lower share of non-deductible input tax.

The EBT reflects the negative trend in the development of the business year compared with the previous year and, at k€ 41,215, it was 15 percent lower than in the previous year (k€ 48,236). The annual profit does not remain with ECC because of the profit-and-loss transfer agreement which ECC has concluded with EEX. According to this, return on equity does not have to be calculated.

Comparison of the earnings situation with the forecast for 2017

Because of the unforeseen negative development of the power derivatives market of EEX Power Derivatives GmbH, the planned bandwidth of commission revenue for 2017 in the range between k€ 86,503 and k€ 89,831 was not reached.

Because of the degressive development of the commission income, the result expected for 2017 was also not reached. The bandwidth of planning for the 2017 corporate result was k€ 54,973 to k€ 57,555.

2.4 Asset situation

The asset situation of ECC is shaped by its business operations as a central counterparty in trading on commodity exchanges.

On the balance sheet date, the balance sheet total was k€ 2,751,310 and, hence, k€ 327,917 lower than the balance sheet for the previous year (k€ 3,079,228).

The assets side of the balance sheet is essentially shaped by balances at credit institutions and central banks. These mainly result from the investment of the cash collateral deposited in the amount of k€ 2,268,785 (previous year: k€ 2,973,739) as security for transactions which were offset by liabilities to the Clearing Members of the same amount. On 31st December 2017, the cash reserve was k€ 2,340,698 (previous year: k€ 3,017,809). This decline in the cash reserve was due to the fact that the cash collateral deposited on the balance sheet date also declined because of the decline in business.

The trust asset position of k€ 344,096 concerns the CO2 certificates held in trust. These have rested with ECC AG since March/April, while, previously, they were reported at ECC Lux. There is a liabilities item under liabilities in the same amount.

Intangible assets added up to k€ 16,235 and were, hence, k€ 171 lower than in the previous year (k€ 16,406). On the balance sheet date, other assets were k€ 14,987 and essentially include lendings to as well as receivables from shareholders and affiliated companies, ECC input tax receivables from the competent tax office in Belgium as well as receivables regarding transaction fees of ECC Lux and EPEX Belgium for physical settlement of the transactions registered for clearing.

At k€ 1,901 deferred expenses and accrued income were k€ 169 higher than in the previous year. Essentially, these largely concerned adjustments to software and systems of Deutsche Börse AG. Here, additions were recorded, in particular, for the margining system PRISMA in 2017.

Liabilities to credit institutions are based on cash collateral received by Clearing Members that are banks and totalled k€ 754,000 (previous year: k€ 1,347,322).

The liabilities to customers include the cash collateral submitted to ECC by Clearing Members (in as far as such are not banking institutions) in the amount of k€ 1,539,472 (previous year: k€ 1,633,486).

There is a letter of comfort for the liabilities of the subsidiary ECC Lux. Moreover, ECC guarantees the fulfilment of the obligations of ECC Lux towards the trading participants on the spot markets for which ECC Lux has taken over the delivery or acceptance of products.

2.5 Financial situation

In accordance with the requirements of the European Regulation (648/2012) on OTC derivatives, central counterparties and trade repositories, ECC is obliged to provide sufficient liquid equity at all times in order to comply with the capital requirements according to Article 16 of the European regulation. If the ratio of equity and capital requirements falls below a threshold of 110 percent, the competent supervisory authority has to be notified forthwith. On the monthly reporting deadlines (01/2017 to 12/2017), the ratio of equity and capital requirements was between 145 and 191 percent and, hence, significantly above the reporting threshold of 110 percent at all times.

Furthermore, according to Article 43 of the European Regulation (648/2012) on OTC derivatives, central counterparties and trade repositories (EMIR), ECC has to provide sufficient liquid financial resources in order to cover the default of the two Clearing Members which cause the biggest liquidity requirement. In accordance with Article 44 of this regulation, ECC compares the existing liquid resources with the liquidity requirement on a daily basis. If the ratio between liquid resources and the liquidity requirement falls below the reporting threshold of 1.1 (which is established internally), the Management Board, on the one hand, has to be informed forthwith and, on the other hand, measures have to be taken to strengthen the liquid resources in accordance with the liquidity plan. The daily ratios were between 1.97 and 3.19 and, as a result, they exceeded the minimum value of 1 required under supervisory legislation.

At the end of the financial year, ECC had balance sheet equity of k€ 88,935 (2016: k€ 73,935). This difference is explained by the capital increase at ECC by EEX of k€ 15,000. As in the past, subscribed capital and retained income were k€ 1,015 and k€ 33,619 respectively. Since a profit-and-loss transfer agreement has been concluded with EEX, the balance sheet profit does not remain in the company. There are external credit lines which can cover additional liquidity requirements arising at short notice. As of the balance sheet date (31st December 2017), these had not been used.

The funds paid for the investing activities of ECC during the reporting year comprise, on the one hand, investments in intangible assets and, primarily, in the IT infrastructure of ECC as well as investments in property, plant and equipment. All in all, investments were k€ 1,505 (previous year: k€ 1,461).

Summary

The business results confirm the success of ECC. In spite of the somewhat difficult situation on the market as described above and lower commission income, the company was able to reach the second-best results in its history and to preserve its sound capital base.

The ECC Management Board is very pleased with the diversification of its revenue structures with regard to which progress was made in 2017. Compared with the previous year, the company significantly outperformed the sales and revenue achieved in almost all business fields – which was particularly positive in view of the challenging market environment and the lasting uncertainties on the market. Only the EPD and EEX profits declined in the financial year under review.

2.6 Employees

At the end of the year, the company had 70 employees. At the end of the previous year, ECC employed a staff of 58.

The age structure is as follows:

ECC employees			
	2017	**2016**	**Change**
< 30 years	12	12	0%
30-39 years	37	30	+23%
40-49 years	17	12	+42%
>/= 50 years	4	4	+0%
Total	**70**	**58**	**+21%**

Rounding differences of ± one unit (TWh, €, %, etc.) may occur in the tables - for arithmetical reasons.

The share of employees with an academic degree was 87 percent (previous year: 88 percent). This share refers to employees with a degree from a university, a technical university or a university of co-operative education. On the balance sheet date, the share of female employees increased slightly to 47 percent of the staff (previous year: 45 percent). As of the balance sheet date, EEX had eleven executive positions, three of which were occupied by women as in the previous year.

3. Risk and opportunity report

3.1 Risk management

Risk management system and objectives

ECC is a central counterparty according to the European Regulation on OTC derivatives, central counterparties and trade repositories (Regulation (EU) Fig. 648/2012). The corresponding permit was issued by the German Federal Financial Supervisory Authority on 11th June 2014. Furthermore, ECC is also a credit institution with the exclusive permission as a central counterparty within the meaning of Art. 1 Paragraph 1 No. 12 KWG [German Banking Act] in conjunction with Art. 1 Paragraph 31 KWG.

The Management Board of ECC holds overall responsibility for the wording and implementation of the business and risk strategy. This provides the framework for the design of the ECC risk management system. Its detailed design is based on the requirements of the European Regulation (648/2012) on OTC derivatives, central counterparties and trade repositories as well as the supplementary technical standards according to the Delegated Regulation 153/2013.

The margin model, the default fund and the other elements of the default waterfall (see under "Lines of Defence") constitute essential risk control instruments for ECC as a central counterparty (CCP). In line with the requirements of the Regulation (EU) No. 648/2012, ECC provides a detailed description of these models on its website.

Risk culture

Dealing with risks is the central business field of clearing houses. As a result, risk culture is an important element of any clearing house. And it begins with the Management Board setting values and representing these values within the company. This includes the requirement of acting with integrity, respecting laws and guidelines and reporting any observed non-compliance within the company.

On the basis of the audit, compliance, project and risk reports, the Management Board develops an impression of the company's risk culture and adjusts priorities, if required. The company's values and the approach to risk prevention and control are communicated to all employees of the company. Training courses ensure that the employees are aware of their responsibility. Within their respective fields of responsibility, the competent management board members work to ensure acceptance of risk-based targets and corresponding values, if applicable, through inclusion in the target agreements with the employees.

Transparency on risks is achieved through open communications with all departments. The head of the essential operating departments and of risk controlling also regularly have to directly and openly report to the Management Board on this.

The incentives and target agreements are not intended to form an incentive to take uncontrolled risks. In addition, with regard to the risk and compliance department the rule applies that no part of the incentives or of the target agreement may provide for participation in the company's profits.

Risk appetite

The risk strategy reflects the risk appetite which is defined as the maximum loss which the Management Board is willing to accept, with a certain confidence level, in one year. The risk appetite provides the framework for taking and controlling risks. The risk appetite includes the specification of the ratio between available capital and expected risk. Moreover, for ECC, it also includes the target of the continuation of the institute and of creditor protection. Below, the risk appetite defined by the Management Board is described for the different risk types:

1. Compliance with regulatory capital
   ECC must comply with the capital requirements according to the EMIR provisions regarding settlement risk, operating risk, default risk and business risk. The directly available equity constitutes the available capital. ECC aims to comply with a target value of 120% of the directly available equity regarding the total capital requirements.
2. Liquidity risks
   ECC carries out stress tests for the liquidity risk. The liquidity risk for the cleared business is controlled using the same parameters as for the counterparty risk of the cleared business. Liquidity risks under the non-cleared business are controlled so that the liquidity forecast under stress does not fall below zero for the next three months.
3. Counterparty risks
   With regard to counterparty risks in the cleared business, ECC aims to ensure that the default waterfall covers the default of the two biggest clearing members under extreme yet plausible market conditions (confidence interval of, at least, 99.9%). As regards counterparty risks from other business, ECC defines its risk appetite with a limit tableau. Other counterparty risks are monitored by risk controlling and included in the risk inventory in as far as such are significant.

4. Other risks

With regard to all other risk categories (business risk and settlement risk), capital amounts are provided in accordance with the requirements of the EU Regulation 648/2012 (EMIR) in conjunction with the Delegated Regulation 152/2013. In as far as needs for adjustments result from other jurisdictions, a decision on the inclusion of the adjustments in the rules and regulations as well as the strategy is taken in line with competences.

The identified risks are managed within the defined risk appetite by using different management strategies:

- Risk reduction, i.e. measures to reduce the impact or likelihood of the occurrence of the risk
- Risk transfer, i.e. transfer of the risk to insurances or third parties in the framework of liability rules
- Risk avoidance, e.g. through adjustments of the business strategy
- Risk acceptance, i.e. conscious risk taking and permanent monitoring and controlling of such.

Structure

Responsibility for the operating design of the risk management system lies with the ECC Chief Risk Officer (CRO).

The risk management system is integrated into all planning, controlling and reporting systems. Moreover, the internal auditing department and the compliance departments are also part of the risk management system. The risk management system is based on the systematic identification, evaluation, documentation and communication of risks. Corresponding principles, processes and responsibilities are established in the guidelines.

A risk report for ECC is prepared across all risk categories every month and communicated to the ECC Management Board. In addition, CRO reports to the Supervisory Board and the risk committee on a quarterly basis. The risk committee is staffed with representatives of Clearing Members, Non-Clearing Members as well as independent representatives. It advises the ECC Management Board with regard to questions of risk control.

In addition, there is an ad-hoc reporting requirement in the event of material changes in the risk situation.

3.2 Description of the essential risks

During the year under review, ECC perceived the relevant risks, which might have adverse effects on ECC and its assets, financial and income situation if they materialise, in the following categories.

Counterparty risk

Since, as the central counterparty, ECC steps into the chain between the buyer and the seller, it assumes both parties' default risks. For this reason, the counterparty risk constitutes one of the most important risks of ECC. At the same time, hedging of this risk constitutes ECC's main task.

One element of the risk strategy of ECC is to fully cover this counterparty risk at all times by building risk coverage potential (lines of defence) with the confidence level required under EMIR so that any loss is fully covered by the lines of defence. As a result, there are only insignificant effects on the assets, financial and earnings situation of ECC. These lines of defence consist of the following essential components:

- **Conditions for admission**: Only institutions which are based in the EU or in Switzerland or certain institutes with registered offices in the European Economic Area, which have sufficient financial strength as well as the operating facilities for the settlement of the clearing business, can be admitted as ECC General and Direct Clearing Members. This is tested during the admission process and monitored continuously. Clearing Members in accepted jurisdictions which do not have a licence as an institute are admitted as Direct Clearing Members. In this context, such members must, at all times, trade within pre-trade limits which must not exceed the existing collateral. Their licence is limited to spot transactions. In addition, ECC plans to offer an interim licence for derivatives transactions in the event of the default of a supporting Clearing Member.
- **Guarantees by System Clearing Members/Pre-Trade Limit System**: The Clearing Member supporting the trading participant guarantees all obligations of the trading participant that is not a Clearing Member, e.g. from the provision of collateral, the delivery of commodities or the daily profit-and-loss settlement. Only the clearing fees owed are exempt from this guarantee. All payments are always collected directly by the Clearing Member. In the event of participation in the context of a Direct Clearing Membership, the guarantee of a Clearing Member does not apply. These participants can only trade in the framework of limits established by ECC.
- **Daily profit-and-loss settlement**: Accrued profits and losses as well as due payment amounts are offset on a daily basis and are credited to or debited from the respective Clearing Member.

- **Individual margins**: Individual margins cover the potential losses from an open position with a security level of 99 percent during a specified holding period.
- **Intraday margin calls**: During business hours, ECC monitors the risks “near to real time” and carries out intraday margin calls and requests additional collateral whenever the risk exceeds certain internal thresholds specified in advance.
- **Allocated own funds of ECC**: ECC shall keep the allocated own funds in the amount specified by supervisory legislation at all times. These allocated own funds serve to cover potential losses which are not covered by the individual margins. The allocated own funds have to be used after the contribution of the clearing fund member that has defaulted but before the entire clearing fund is used.
- **Clearing fund**: The clearing fund is a joint form of security provided by all Clearing Members. It covers potential losses which are not covered by individual margins. The amount of the clearing fund is established on the basis of stress tests which are carried out on a daily basis and fulfil the EMIR requirements. These tests simulate the effects of the default of the biggest participant and of the two participants which have the highest exposure. This is done subject to the assumption of various extreme yet plausible market price developments. In addition, an individual minimum contribution is established from the historical additional individual margin of a given Clearing Member (including its Non-Clearing Members and customer positions) over the last twelve months. Depending on the assessment of a given Clearing Member’s risk ECC also establishes an absolute minimum contribution to the clearing fund.
- **Power of assessment**: ECC plans to introduce a requirement for further capital contributions up to, at a maximum, the amount of the clearing fund contribution. This can be requested from the Clearing Members that have not defaulted in the event that the resources of the clearing fund are not sufficient in order to cover the consequences of a default of a Clearing Member.
- **Obligation to replenish the clearing fund for further defaults**: The clearing fund has to be replenished to the original amount within a period of 10 business days after it has been used. If a Clearing Member or Direct Clearing Member is in default, clearing fund contributions are released, at the earliest, one month after all obligations of the Clearing Member or Direct Clearing Member that has defaulted have been settled.

- **Further own resources of ECC**: ECC's further own resources cover potential losses that are not covered by earmarked own funds of ECC, individual margins or by the clearing fund.
- **Assumption of losses by the parent company**: In the context of a profit-and-loss transfer agreement, the parent company of ECC, European Energy Exchange AG, has to compensate any net losses which occur.
- **Collateral requirements and collateral haircuts**: ECC accepts cash collateral, highly liquid securities collateral by issuers with a low credit risk and emission allowances as collateral. Market price fluctuations are covered by adequate collateral haircuts. Collateral is re-assessed at market prices, at a minimum on a daily basis. Guarantees by certain issuers with a low credit risk are accepted for covering collateral requirements on Spot Markets. Concentration risks are controlled by assigning concentration limits.

Own funds are only invested in investments with minimum credit risk (e.g. as a secured investment and with counterparties with a zero weighting under supervisory legislation) and the highest possible liquidity.

The potential losses arising from the default of due clearing fees are relatively low and are considered in the risk coverage assets.

Based on the worst-case stress scenario which serves the calculation of the clearing fund volume, a reverse stress test is carried out in order to identify the stress scenario under which the individual margin requirements, the clearing fund (including ECC's own contribution) and the ECC risk coverage assets are used up.

Operational risks

At ECC, operational risks are defined as comprising all potential cases of damage resulting from:

- Malfunctions of the IT systems used,
- Inadequate design of internal processes,
- Errors by employees,
- Errors by or default of external service providers and
- Legal risks.

The potential effects of such can be financial damage (e.g. a liability towards business partners or costs for remedying damage). The ECC risk strategy pursues the fundamental aim of minimising operational risks by means of the far-reaching automation in connection with approved methods of systems development and comprehensive test procedures. ECC provides core services itself and also uses external service providers in order to generate economies of scale (in particular as regards system operations). The quality of the service providers is examined in the framework of the selection process and continuously on the basis of the service level agreements concluded. Back-up processes are implemented for critical business processes. The quality of the internal control system is checked regularly by means of audits of the internal and external auditing organisations.

Physical delivery risks are minimised, e.g. by aiming to establish priority rules for nomination at ECC in the conclusion of balance agreements – in as far as such are negotiable. If this is not possible in individual cases, the physical delivery risks are monitored and covered by margins. Moreover, continuous investments in the ECC settlement infrastructure also make a substantial contribution to managing this risk.

In addition to this, ECC also has pecuniary damage liability insurance with regard to cases of damage caused by errors in commercial operations (E&O insurance). The potential losses from operating risks remaining after the payment of insurance sums are considered at the amounts required under supervisory legislation in the risk-bearing capacity concept.

Internal processes are described in the “written rules of procedure” of ECC. These contain process descriptions and controlling activities for all essential processes. They are documented in checklists in order to reduce the likelihood of human errors or omissions.

Legal risks are minimised through the use of the standard set of rules and regulations of ECC in combination with standardised contract forms.

Once a year, ECC carries out a top-down OpRisk self-assessment with the support of the risk management of DBAG and communicates the risks identified to the Management Board of ECC. In addition, a bottom-up self-assessment of information security risks is also carried out and updated at regular intervals based on the requirement of protection of the respective data. Risk controlling combines both risk perspectives into an overall risk perspective of operating, commercial and political risks in the risk report.

A damage database is kept for the on-going monitoring and reporting of cases of damage during operations. In this database, all operating events (even if such have not led to any direct financial damage) are recorded in a decentralised form and, afterwards, analysed with the participation of the competent members of the Management Board on a monthly basis. If required, measures are adopted and implemented.

The operational risk is quantified with the help of the supervisory legislation requirements under the EU Regulation 648/2012 (EMIR) in conjunction with the Delegated Regulation 152/2013 (see also the section “EMIR Risk Parameters” on capital requirements).

Liquidity risk

Liquidity risks can arise both from the settlement of the on-going business (uncovered risk) and in the event of a default of a Clearing Member (covered risk).

On account of the ongoing business, the settlement of the on-going business does not lead to any material differences in time periods.

The ECC risk strategy pursues the aim of avoiding differences in time periods in the balance sheet by means of an adequate investment policy. The financing requirements for current expenses (incl. profit distributions) and investments are planned and covered in the framework of medium-term planning. Any unplanned funding shortfalls (which might essentially result from taxation matters) are covered by providing liquidity reserves. The liquidity risk is monitored and reported on the basis of the following criteria:

- Rolling 12-month liquidity forecast,
- Analysis of the business risks with the help of various scenarios of business development (which have an effect on liquidity as a result of the discontinuation of cash flows in the form of trade fees) as well as
- Expected wind-down period (period for which ECC would survive in the event of the discontinuation of inflows of cash within the meaning of a reverse stress test).

The default of a Clearing Member and the effects on liquidity are controlled as follows in accordance with the requirements under Article 44 of EMIR in conjunction with the Delegation Regulation 153/2013:

- High requirements put to the convertibility of collateral to be furnished into cash,
- Adequate haircuts on collateral furnished,
- Provision of liquid resources which, at least, cover the liquidity requirement in the event of the simultaneous default of the two Clearing Members which generate the highest liquidity requirement in extreme yet plausible market conditions (stress test) and
- Maintenance of lines at various institutions and the parent company as well as access to the Bundesbank intraday credit.

ECC daily prepares a liquidity report regarding the existing liquid resources as well as the liquidity requirement in the event of the default of the two Clearing Members which generate the highest liquidity requirement under extreme yet plausible market conditions. Moreover, the potential sources of liquidity risks are recorded in the liquidity plan which is updated on a quarterly basis and communicated to the entire Management Board.

Market price risks

On account of the positions which are closed on principle in the clearing business, there are no market price risks. The market price risks resulting from the remaining business operations (essentially foreign currency risks) are insignificant and controlled in accordance with the situation.

Compliance risks

ECC is exposed to compliance risks, in particular, in the field of sales tax fraud, damage to reputation resulting from the unauthorised publication of information and from abuse for money laundering purposes. Furthermore, in its capacity as a credit institution, ECC has to ensure that transactions are not carried out with either natural persons or legal entities listed in the relevant sanctions lists.

ECC settles all transactions via Clearing Members or settlement banks. Since, as banking institutions, these are subject to the rules of the German Banking Act (or of other equivalent provisions) regarding the implementation of measures to fight money laundering, financing of terrorism and other criminal acts, ECC only has a low risk of being abused for money laundering, financing of terrorism or other criminal acts. This risk is re-evaluated in a risk analysis on an annual basis.

The ECC risk strategy aims at identifying any counterparty with a higher risk profile as early as during the initial stage of the business relationship by means of a standardised know-your-customer process and a scoring procedure which were developed in cooperation with the exchanges and markets for which ECC provides clearing. In addition, all potential counterparties are checked during the admission process of the exchange and markets or Clearing Members.

During the admission process of new Clearing Members or settlement banks, ECC inquires whether these have implemented adequate measures to combat money laundering. In the event of justified doubt during the ECC admission process, a decision by the ECC Management Board is brought about.

Moreover, ECC checks all business partners, including important associated companies of these, against known sanctions lists in the framework of the admission process as well as on a monthly basis and, if required, ad hoc upon the emergence of new facts (e.g. amendments of sanctions lists and suspicious facts) or during a cyclical review.

Sensitive information and information which has to be protected is given special protection by ECC. Moreover, ECC has established rules to combat fraud and corruption.

Business and settlement risk

The essential business risk consists of the company's dependence on only a few high-revenue markets and a potential decline of revenue while fixed costs remain unchanged since the ECC revenue largely depends on sales.

ECC's risk strategy aims at controlling this risk by including it in risk reporting, comparisons with competitors and monthly financial reporting by means of target-actual comparisons.

ECC monitors the regulatory changes in cooperation with the European Association of CCP Clearing Houses (EACH) and the auditors and it has developed the competence to assess and control these strategic risks.

Moreover, the business and settlement risks are considered in the risk-bearing capacity calculation: In accordance with the requirements under the Delegated Regulation 152/2013, ECC, at least, provides a capital amount sufficient for operating expenses for a period of nine months based on the last audited annual financial statement. A complete erosion of the business model is considered in the scenario analysis in the calculation of the wind-down period (reverse stress tests).

Tighter regulation in the financial and energy sector as the central risk

Regulation on capacity allocation and congestion management (CACM)

The EU regulation specifying a guideline for capacity allocation and congestion management (CACM) outlined in section 2.1 "Regulatory Framework Conditions" and the introduction of the Nominated Electricity Market Operator (NEMO) contained therein also entails risks for EEX Group. In future, the NEMOs can use the market depth and the development status of EPEX SPOT with the aim of implementing uniform day-ahead market coupling and the uniform intraday market coupling, and benefit from the existing liquidity as a result without necessarily contributing more liquidity. For example, the XBID project which aims to establish a pan-European intraday solution leads to a situation in which EPEX is forced to share liquidity in all of its markets with other NEMOs. This can lead to two-digit losses in the intraday trading volumes. On the other hand, the CACM regulation creates the possibility to offer (day-ahead and intraday) trading services with delivery in other member states without the need for a NEMO to be appointed in this member state or actively operating in it previously. This reciprocity creates uniform conditions for power market operators in Europe. For EEX Group, this means a possible market entry of competitors into the EPEX markets. On the other hand, it also entails the possibility of opening up new market areas.

EU Markets in Financial Instruments Directive (MiFID)

The definition of financial instruments in the European regulatory directive MiFID II is of tremendous importance for the trading participants. This was already outlined in section 2.1 under "Regulatory Framework Conditions". The revision of the EU Markets in Financial Instruments Directive MiFID changed the rules for trading in financial instruments and, as a result, in commodity derivatives as of 3rd January 2018. The general exception for commodity derivatives included in MiFID I so far was cancelled and replaced by a so-called "ancillary activity exemption" in MiFID II. Therefore, only trading participants with trading activities which are low compared with their other activities will be exempt from the requirements of MiFID II. Those trading participants, however, that are subject to MiFID II because they exceed certain thresholds are considered "financial institutions". As a result, these companies have to fulfil a number of additional requirements, e.g. organisational and capital requirements. Therefore, the implementation of these rules is expected to have significant impacts also on the energy markets.

The details regarding the implementation of MiFID II/MiFIR are established in the so-called regulatory technical standards (RTS) which are now available in their final version. The RTS, e.g., govern the threshold values for the determination of the ancillary activity exception as well as the clarifications regarding publication and reporting requirements. This is positive, in as far as the so-called "Capital Employed Test" has become a firm element of the regulation. This means that invested capital is taken into account in calculating the ancillary activity. It was implemented into German law with effect as of 25th June 2017 with the entry into force of the Second Law Amending Financial Market Provisions on the Basis of European Legal Acts (Second Financial Market Amendment Act, 2nd FiMaNoG). In addition, the concrete implementation was designed at the level of the European Securities and Markets Authorities (ESMA), even though there were significant delays in the process. In practice, we will have to see whether and to what extent the customers of EEX Group will be affected by these tougher regulations. It is undisputed that the requirements overall will increase and that every company will have to deal with the new regulatory situation individually.

With reference to excessive speculation and high volatility on the agricultural market, on 3rd January, MiFID II/MiFIR also introduced so-called position limits which apply to trading in energy derivatives too. Based on the underlying "baseline limits" for energy derivatives, the regulators in charge of EEX Group, the Federal Financial Supervisory Authority (BaFin) (for power contracts) and Autorité de Marchés Financiers (AMF) (for gas contracts), published indicative position limits for contracts with more than 10,000 traded lots in November and December 2017. It remains to be seen which effects the limits set will have on trading participants of EEX Group; if these are exceeded, however, positions would have to be reduced and trading activities might have to be limited, if applicable. Furthermore, the regulators have the possibility of changing and, for example, lowering limits after a review. Therefore, the further development needs to be monitored and accompanied closely even after 3rd January 2018.

In addition, certain physical derivatives on gas and power which are traded over the counter are not classified as financial instruments. This means that trading in such derivatives is not regulated via MiFID II. These less regulated products can only be traded on platforms referred to as “Organised Trading Facilities (OTFs)”. Trading transactions which are concluded at an OTF are exempt from MiFID II, while similar transactions concluded on a regulated market or on an exchange are covered by the scope of application of MiFID II. As a result, OTFs have a regulatory advantage with regard to physical power and gas derivatives trading and there is the risk of a massive shift in volumes away from the exchange and towards the OTFs. This can lead to general restraint on the part of the players in trading with EEX products. A general decline in trading activities is also conceivable. In order to give customers a possible alternative, EEX and Powernext set up a so-called Non-MTF as a precursor of an OTF in 2016, which is to be converted into an OTF after the issue of a corresponding license as of 3rd January 2018.

Moreover, EMIR also uses the definition of financial instruments provided in MiFID so that these over-the-counter physical derivatives are also not regulated by EMIR. As a result, trading in such physical derivatives has significant regulatory advantages as against the products offered by EEX (no need to obtain a financial services licence along with the requirement of providing corresponding equity, no position limits, no reporting requirements and no mandatory clearing according to EMIR, etc.). As a result, volumes which are registered for clearing using the Trade Registration channel are also subject to this risk since derivatives traded over the counter are converted into financial instruments in the Trade Registration process.

Financial transaction tax

The introduction of a joint financial transaction tax in individual EU member states – including Germany – is still the subject of political negotiations, although the introduction of such a tax appears increasingly unlikely. The question of whether and in which form derivatives on commodities are to be included and how this is to be implemented specifically still remains open at present. Even if it is promised that such a tax should have the lowest possible effects on the real economy, it could have a lastingly negative impact on derivatives trading. The most negative lasting effect of a financial transaction tax would be a shift in trading activities to trading platforms in countries not affected by such a tax since this would form a clear competitive advantage for competitors.

Regulation for central counterparties

The regulation for CCP at a European level will be tightened further in 2018. Essential initiatives include the revision of the EMIR provisions (EMIR Refit), the preparation of a regulation regarding CCP settlement (Recovery and Resolution) as well as the discussion of the distribution of tasks between national supervisory authorities and the European Securities and Markets Authorities (ESMA). As a financial institution under the German Banking Act, ECC is also affected by the revision of the minimum requirements for risk management (MaRisk), which were published in later 2017. In this connection, the supervisory legislation practice of the Federal Financial Supervisory Authority has evolved which is reflected, in particular, in requirements from ongoing reviews. Overall, ECC expects that these tighter requirements will lead to changes in processes and procedures as well as the organisation of ECC resulting in partly higher requirements.

Change in energy market design

Power market: Configuration of pricing zones

The debate regarding the restructuring of bidding zones in the power market has already been described in section 2.1 under “Regulatory framework conditions”. Even though as a trend market mechanisms and price signals are to become more important, the discussion regarding the structure of the bidding zones on the European market has intensified, which, in turn, leads to lasting uncertainty. The Federal Network Agency and E-Control have agreed that the transmission system operators are to take preparatory measures for congestion management at the German-Austrian border and that, as a result, the price zone will be split into two national market areas from October 2018. The implementation of this made progress in 2017.

At the same time, there are further processes at a European level at ACER and ENTSO-E (European Network of Transmission System Operators for Electricity) that deal with the structure of the bidding zones in Europe and that can potentially also influence the German-Austrian market area as well as further price zones. So far, the question of which process will ultimately apply and who will take final decisions has not been resolved with absolute certainty. This problem is also highlighted by the fact that E-Control has taken legal steps against the decisions by ACER invoking lack of competence or an incorrect legal basis. So far, a court decision on this has not been issued.

It is fundamentally positive that the uniform German power price zone was determined at a national level in the Electricity Grid Access Ordinance in December 2017. However, there is still uncertainty as a result of the – as yet unclear - interactions with the processes at a European level.

The expected split and the uncertainty of the political framework conditions had a negative effect on the entire power market in 2017. In any case and regardless of the specific design, possible further splits are expected to have negative effects on the markets of EEX Group. This does not only concern liquidity which would be lower in smaller market areas but also the quality of the price signal – and both of these aspects are perceived as being counterproductive against the backdrop of the further development of the market design with the envisaged strengthening of the market signal and the increase in flexibility. As a result, the potentials of the market-based European integration and innovations cannot be fully developed. There is even the risk that the aims attained with liberalisation – in particular, the integration of the European power markets – might be called into question and lastingly affected.

At present, talks involving the transmission system operators and power exchanges concerned are underway in order to implement the split of the German-Austrian bidding zone. As seen from the perspective of EEX Group, care has to be taken to ensure that a division is carried out with the lowest possible impact on the market.

Energy turnaround and power market design

The increasing transformation of the energy markets to cater for renewable energies creates challenges for the current market design and will require it to be modified and developed further. In addition to the market integration of renewable energies, this will also have effects on other fields, such as e.g. grid expansion or aspects of the security of supply in the event that fluctuating renewable energies might not be able to sufficiently cover the load requirements.

In Germany, the federal government took a fundamental decision as early as in 2016 and created a framework for the power market of the future with the new Electricity Market Act. The Electricity Market Act focuses on the price signal – which is essentially established on the exchanges – as well as the competitive and innovative strengths of the market. Even though the introduction of a separate capacity market was dispensed with, a so-called security reserve based on lignite-fired power plants was introduced in order to ensure the security of supply. In addition to this, a number of supporting provisions are defined in detail. These pursue the aim of further developing the power market and, in particular, enhancing its flexibility. These measures, e.g., include increasing balancing group responsibility as well as grid- and transparency-related measures. Moreover, further detailed provisions for many of these measures were introduced in 2017.

After the reform of the Renewable Energies Act (EEG) in 2016, the first regular invitations to tender for the competitive determination of the amount of funding for renewable energies were held in 2017. The experience gathered so far has been positive with tender prices declining constantly. At the invitation to tender for off-shore wind power plants in April 2017, two bidders were awarded contracts at a price of € 0 – i.e. without funding. On the one hand, these results show that the competitive organisation of funding develops cost reduction potential and that the players in the market expect to be able to refinance their investments on the market. This argument might support a complete withdrawal from funding of renewable energies in the future. On the other hand, it remains to be seen which effects competitive cost pressure will have on the diversity of the players and, as a result, on the acceptance of the energy turnaround and whether those projects which were awarded contracts will actually be implemented with the amount of funding to which they are entitled. Ultimately, this will determine whether political decision-makers see any further need for action and how this will be implemented in detail, if applicable. While Germany has already paved the way for the "Power Market 2.0", as a result, the debate on energy market design continues at the European level. In the framework of its strategy for the energy union, the EU Commission presented a comprehensive package of proposals regarding the revision of existing and the introduction of new legal provisions for the internal power market under the title "Clean Energy Package". This package, e.g., includes proposals for the fields of energy efficiency, renewable energies, the design of the power market, security of supply and the governance rule for the energy union. The energy union is one of the ten priorities of the current EU commission. Therefore, it set up its winter package in the comprehensive context of the energy turnaround and climate protection on the one hand and economic growth, investments and new jobs, on the other. Moreover, the focus in regulation increasingly moves to the consumers. This concerns both their increasingly active role on the energy market as well as higher transparency and participation and, as a result, growing acceptance of the switch of the energy system to predominantly renewable energy sources.

As seen from the perspective of EEX, the basic trend and most proposals contained in the package can be assessed as being positive since they reflect trust in competitive and market-based principles.

- The creation of a functioning and integrated power market is based on strong price signals. The abolition of regulated prices in all member states is called for.
- The commission requests the member states to promote the introduction of long-term hedging products in order to integrate more renewable energies in the power system and enable market participants to hedge price risks. EEX already fills this cap with the development of innovative financial products, such as the Wind Power Future and the Cap Future.

- It has been found that uncoordinated national political measures do not promote a working internal energy market since they distort border-crossing trading and, as a result, lead to higher costs for the final consumers.
- The specification of minimum requirements for capacity mechanisms has to be assessed as being positive. Moreover, the need for their introduction must be proven with a standardised assessment of the security of supply situation.

However, there is also room for the further development of the proposals. For example, the reports of the member states regarding the progress achieved in the attainment of the EU climate and energy objectives for 2030 should focus more on functioning energy markets.

Especially all those requirements aiming for a possible reduction of the size of existing bidding zones have to be assessed as being critical. This impedes the aim of an integrated market and disregards the high value of the existing power derivatives market for the provision of reliable price signals and new trading products.

Risk parameters according to EMIR

The equity available to cover risks is established on the basis of the EMIR provisions based on the balance sheet equity of ECC. On 31st December 2017, the EMIR equity was k€ 80,612 (previous year: k€ 60,912).

Potential losses from the default of ECC Clearing Members are covered by the multi-tier margin system of ECC. In order to ensure compliance with the requirements under Article 45 (4) of the Regulation (EU) 648/2012 on OTC derivatives, central counterparties and trade repositories in conjunction with Article 35 of the Delegated Regulation (EU) 153/2013, ECC has formed earmarked retained earnings, which are also referred to as “skin-in-the-game”, to fulfil the requirement regarding allocated own funds. The volume of this provision is reviewed, at least, annually and adjusted if required. In the financial year under review, k€ 2,500 from retained income were added to the provision under EMIR. As a result, it was k€ 10,000 on 31st December 2017. For this reason, this risk category is not compared as against risk coverage assets above and beyond these retained earnings.

On the balance sheet date, the necessary capital requirement with regard to the credit risk (i.e. the risk exceeding the default risks towards trading participants indicated) was k€ 1,592 (previous year: k€ 1,384).

With regard to operational risks, a capital requirement of k€ 8,108 is assessed in accordance with the requirements of the Delegated Regulation 152/2013 (previous year: k€ 5,960).

The capital requirement with regard to business risks and wind-down costs is established in accordance with the specifications in the Delegated Regulation 152/2013. On the balance sheet date, capital expenditure for business risks was k€ 9,080 (previous year: k€ 6,541), while it was k€ 18,160 for settlement risks (previous year: k€ 13,082).

The risk coverage assets available to cover risks are considered as being sufficient to cover the expected risk at all times.

3.3 Description of the essential opportunities

For a holistic impression of the business operations of ECC, the opportunities have to be considered, in addition to the risk aspects.

Opportunities are managed in the framework of strategic management, corporate development and of the continuous improvement process. In this framework, opportunities for technological developments, new pricing strategies or potential partnerships are identified. The projects are, e.g., prioritised in the framework of the institutionalised strategy discussion and of the planning process. In this process, the added value as seen from the perspective of the customers is taken into account just like the strategic aims and the available resources. Essential opportunities are characterised by a significant impact on the assets, financial and income situation and, as a result, they are also regularly submitted to profitability assessments during the prioritisation phase.

ECC's position as a specialist clearing house for energy and related products with an integrated business model constitutes a unique selling proposition compared to the competitors. This creates opportunities for ECC to win over exchanges which have not been connected to ECC so far as cooperation partners. In this respect, identifying, developing and continuously communicating the energy market-specific advantages of the ECC settlement systems to potential new partners are of decisive importance. The approach of integrated clearing constitutes an essential advantage over competitors. This model offers significant cost advantages, in particular, for trading participants operating on several market platforms, since contrary positions can be considered in the calculation of the collateral to be furnished (cross-margining) and the costs of connection decline. Compared with over-the-counter trading, continuous improvements of the IT infrastructure, such as the so-called "Straight-Through Processing", which permits the automatic submission of contracts negotiated bilaterally and registered on the exchange subsequently, permits efficiently cleared settlement of volumes traded off the exchange. For example, in 2017, a new STP service provider (KB TECH Ltd.) was found in order to create an additional registration channel. In addition, a technical solution for the management of possible financial risks from Trade Registration transactions was implemented with the STP Risk Limit Service.

The use of trade limits at partner exchanges constitutes a fundamental element for the reduction of access barriers to clearing and enables Clearing Members to effectively control the risks of their Non-Clearing Members. With central limit administration across exchanges, ECC launched an innovative tool for the efficient determination and administration of trade limits in 2016 and, as a result, it increases its attractiveness for Clearing Members. Together with the partner exchanges, ECC is continuously working to expand the limit functionalities. In 2017, the trade limit methodology of EPEX was expanded. As a result, the trading participants' flexibility on Saturdays, Sundays and Mondays increased.

Furthermore, against the backdrop of the regulatory requirements, the importance of the clearing business can increase further. The expansion of the current clearing services, e.g., to other countries and trading hours might significantly simplify access for new trading participants and further improve ECC's position in the global clearing business. The expansion of the collateral accepted by ECC and the extension – and, where possible, simplification – of the conditions for access to clearing constitute further possibilities for expanding the clearing business.

In addition, measures designed to lower market entry barriers for small and medium-sized companies offer further opportunities. The continuous development of the Direct Clearing Participant Clearing Member model can help to achieve this.

3.4 Overall statement on the risk and opportunity situation

Overall and under consideration of the partner exchange approach as well as of the more diversified revenue structure, its earning power and financial stability, ECC is convinced that it has established a sound position for itself to attain the targets pursued and further strengthen its position as a leading clearing house in Europe. This is based on the competitive value chain within EEX Group which is characterised by liquid trading markets and cost-effective clearing solutions. The Management Board is confident that the risk and opportunities management system established in the Company will identify risks and opportunities early on also in future and that, as a result, the risk situation as it presents itself at present can be managed successfully and that potential opportunities can be used.

4. Forecast report

The forecast report describes the probable development of ECC in the 2018 financial year. This report contains forward-looking statements. It is based on current expectations, assumptions and forecasts by the Management Board and on the information which is currently available for it. These forward-looking statements should not be considered a guarantee of the future developments and results mentioned in these. The future developments and results rather depend on a large number of factors. They comprise various risks and uncertainties and are based on assumptions which might turn out to be incorrect. We do not accept any obligation to update the forward-looking statements provided in this report.

The following assumptions were made in the framework of planning of the economic, regulatory and competitive environment in 2018.

- Potential changes in the regulatory environment (in particular, with regard to OTF) will not place regulated platforms at a disadvantage.
- No impairment as a result of regulatory changes for the financial markets (e.g. higher capital requirements for Clearing Members, no introduction of a financial transaction tax)
- No fundamental change of the ECC risk profile

In the coming financial year, ECC will focus on further increasing the stability of its systems and the further development of its services in order to promote customer satisfaction and expand the product portfolio. The organisation will invest in the nomination infrastructure and further develop the Direct Clearing Participant model, introduce the new PRISMA margining model and expand limit management. Moreover, there are plans to expand the clearing offering with the Irish power spot market through the cooperation with the Irish transmission system operators EirGrid and SONI Ltd. as well as EPEX SPOT.

Income from commission fees is expected to be more than 30 percent higher than in the previous year. Apart from this, clearing of the power spot and derivatives market is again expected to be the mainstay of revenue in 2018. Moreover, the commission income in the natural gas segment is increasingly gaining in importance and, as a result, supports the ECC diversification strategy.

In 2018, the ECC fixed costs are expected to more than 15 percent higher than in 2017. This increase in costs is primarily due to higher personnel expenses in the framework of planned new recruitments and to salary adjustments. Moreover, growing overheads and higher operating IT costs are expected with the latter being due to expenses for maintenance, optimisation and the further development of existing clearing systems and straight-through processing in order to generate increases in sales and economies of scale in future. Last not least, the expenses for balancing groups which are based on sales also increase in connection with the growing volumes.

Based on the development of the commission income outlined, ECC expects EBT to be 25 percent higher than in 2017.

In the event of an unfavourable development of the framework conditions for ECC, ECC still considers itself as being able to profitably operate its business because of its successful business model. Sensitivity analyses have shown that a decline in commission income of 10 percent as against the plan would result in a drop in earnings of approximately 16 percent. In this context, it was e.g. assumed that variable costs would develop in line with the transaction revenue and that all other cost items would remain stable.

ECC is convinced that, with its integrated clearing model, it still has a very good position and expects its revenue to develop positively both in the coming year and in the medium term.

Leipzig, 22nd March 2018

Peter Reitz
Chief Executive Officer (CEO)

Steffen Köhler
Member of the Board (COO)

Dr. Thomas Siegl
Member of the Board (CRO)

Iris Weidinger
Member of the Board (CFO)

Auditor's Report

We have audited the annual financial statements, comprising the balance sheet, the income statement and the notes to the financial statements, together with the bookkeeping system, and the management report of the European Commodity Clearing AG, Leipzig, for the business year from 1 January 2017 to 31 December 2017. The maintenance of the books and records and the preparation of the annual financial statements and management report in accordance with German commercial law are the responsibility of the Company's management. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, and the management report based on our audit.

We conducted our audit of the annual financial statements in accordance with § 317 HGB [German Commercial Code] and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit in such a manner that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with [German] principles of proper accounting as well as in the management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Company and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records, the annual financial statements and the management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual financial statements and management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the annual financial statements comply with the legal requirements and give a true and fair view of the net assets, financial position and results of operations of the Company in accordance with [German] principles of proper accounting. The management report is consistent with the annual financial statements, complies with the German statutory requirements, and as a whole provides a suitable view of the Company's position and suitably presents the opportunities and risks of future development.

Frankfurt am Main, 22 March 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Dielehner	Hommel
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]