



Annual Report 2016

Kärnavfallsfonden, c/o Kammarkollegiet
P.O.Box 2218, SE-103 15 Stockholm
Phone: +46 8-700 08 00
Fax: 08-20 38 81
e-mail: karnavfallsfonden@kammarkollegiet.se
Internet: www.karnavfallsfonden.se
Organisationsnummer: 202100-4904



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Preface

Together with the Swedish Radiation Safety Authority (SSM) and the National Debt Office, the Nuclear Waste Fund plays an important role in ensuring that sufficient financial resources will be available for disposal of the spent nuclear fuel and decommissioning and dismantling of the nuclear power plants.

Since the start in 1996, the Nuclear Waste Fund has achieved a good return on the managed capital. The foremost reason for this is that the trend in bond rates has been sharply falling, at the same time as the Fund has invested in bonds with a relatively long remaining maturity. Falling interest rates mean that the value of such a bond portfolio increases, which results in a higher return due to revaluation gains on the bond holdings.

The preface to last year's Annual Report noted that the market rates had then reached such a low level that a continued fall in interest rates could not reasonably be expected. Instead, bond rates could be expected to rise, leading to revaluation losses on the bond holdings and downward pressure on the Fund's return. Against all odds, however, interest rates have continued to fall during the year, with a slight recoil at the end of the year after the American presidential election. All things told, this meant that the Fund return reached 5.6 percent in 2016, which was quite acceptable.

However, last year's warning for future interest rate increases bears repeating in this year's preface with even greater force. Even with unchanged interest rate levels, the return will be modest, around zero percent. The changed market situation has made it

increasingly urgent that the Fund be allowed to invest in more asset classes than at present.

During the year the Fund has recommended that the Government, as a first step, should permit investments in other types of bonds than is now permitted, in particular corporate bonds and foreign bonds. It was the judgement of the Nuclear Waste Fund that this could be done with a very moderate increase in the total risk level in the investments and in the financing system as a whole. The Government chose not to act on the proposal.

During 2013, SSM, in consultation with the Nuclear Waste Fund and the National Debt Office, submitted a report to the Government with proposals for changes in the financing system based on a holistic view of the system. This included proposals for a broadened investment spectrum. The Ministry of the Environment has referred the proposal for consideration and comment. During the year the Government parties concluded an energy agreement with the Moderates, the Centre Party and the Christian Democrats. Several of the proposals in SSM's report are dealt with in the agreement, for example the agreement includes increasing the Nuclear Waste Fund's investment options starting in 2018.

It is particularly urgent for the Nuclear Waste Fund to get more detailed information as soon as possible concerning the future investment rules so as to be able to prepare for 2018.

Issues surrounding risk have also been in focus during the past year. The Nuclear Waste Fund set up a risk and compliance function during the year to advance this work.

Stockholm, February 2017

Daniel Barr
Chairman

Presentation of results

Regulatory framework

The activities of the Nuclear Waste Fund are governed by the provisions of:

- the Act (2006:647) on Financial Measures for the Management of Residual Products from Nuclear Activities (the Financing Act) and the Act (1988:1597) on the Financing of the Management of Certain Radioactive Waste etc. (the Studsvik Act),
- the Ordinance (2008:715) on Financial Measures for the Management of Waste Products from Nuclear Activities (the Financing Ordinance) and the Ordinance (1988:1598) on the Financing of the Management of Certain Radioactive Waste etc. (the Studsvik Ordinance), and
- the Ordinance (2007:1055) with Terms of Reference for the Nuclear Waste Fund.

Tasks

According to the above acts and ordinances, the main task of the Nuclear Waste Fund is to

- manage Fund assets
- receive fee payments
- arrange disbursements on request from the Swedish Radiation Safety Authority (SSM)
- keep SSM informed of the size of the funds that have been set aside for the costs of each reactor owner and every other licensee.

According to the Ordinance with Terms of Reference for the Nuclear Waste Fund, Kammarkollegiet performs administrative services for the Fund under a contract between the Fund and the Agency.

Under the contract, Kammarkollegiet is also responsible for capital management within the framework determined by the Board of Governors.

The Fund has no employed staff.

Performances and costs

The Nuclear Waste Fund's most important performance is the return that is earned on the Fund's capital. This result is presented in the section headed "Return" below.

The Government has approved compensation from the Nuclear Waste Fund (budget) for the Fund's management costs.

The following table shows the Government-approved budget and the outcome for the past three years.

Table 1: Fund management costs

(SEK thousand)	2016	2015	2014
Government-approved budget	11,950	11,420	11,470
Outcome	11,917	11,419	11,217
- of which remuneration to Kammarkollegiet	11,000	10,620	10,620

Total fund management costs amounted to 0.018 percent of the market value of the managed capital at the end of 2016, consisting of 0.012 percentage points for asset management and 0.006 percentage points for administration.

Capital management

Goal

The Financing Ordinance (Section 19) states that the assets in the Nuclear Waste Fund shall be managed to ensure a good return and satisfactory liquidity. No more specific goals have been set by the state.

In its investment policy, the Board of the Nuclear Waste Fund has formulated its long-term goal for real return in the following manner:

"The goal is – taking into account the restrictions imposed by the Government on the investment activities – to achieve the highest possible real return on the managed capital.

By 'real return' is meant the nominal return less inflation, measured as the percentage change of the consumer price index during the measurement period."

Investment restrictions

The Financing Ordinance (Section 19) also states that the Nuclear Waste Fund's assets shall be deposited in an interest-bearing account at the National Debt Office, in treasury bills issued by the state or in covered bonds.

This means that investments are restricted to the following options:

- Sight deposits in accounts at the National Debt Office, with nominal return based on the repo rate.
- Short-term deposits at a fixed interest rate at the National Debt Office with an investment period that can vary between one month and one year.
- Investments on the market in treasury bills, fixed-income bonds or index-linked bonds issued by the National Debt Office.
- Investments on the market in debt instruments issued in accordance with the Covered Bonds Issuance Act (2003:1223).

Covered bonds are mortgage-backed bonds issued by housing finance institutions that are secured by a specially identified pool of assets consisting as a rule of mortgages which the institution has taken in as collateral for its own lending.

The Studsvik Act (Section 3) states that the fees under that Act shall be transferred to the Nuclear Waste Fund and that the rules in the Financing Act shall be applied to their management.

Investment policy

The Board of Governors has established an investment policy for the Nuclear Waste Fund. The investment policy must be reviewed at least once a year.

The purpose of the policy is to provide rules for the investment of the Fund's assets. The policy sets the goal for rate of return while defining the division of responsibilities between the Fund's Board of Governors and Kammarkollegiet. The policy stipulates how different risks are controlled and limited and how the results of fund management are to be reported.

Active management

The Nuclear Waste Fund's assets are managed actively. This means that the investments deviate from the mix of securities that constitute the index for the purpose of achieving a higher return than that achieved by passive management (index management). Passive management entails that the investments mirror the composition of the index as closely as possible.

The basis for active management is the standard portfolio, which conforms to the Board of Governors' decision regarding the distribution between index-linked and fixed-income investments. Active

management is exercised by virtue of the fact that Kammarkollegiet is allowed to deviate from the standard portfolio within certain limits. Further, active management is exercised by Kammarkollegiet's decisions regarding the distribution between a) investments for which the National Debt Office is responsible and b) covered bonds within the risk limits set by the Board of Governors, and regarding the duration of the investments within the risk limits set by the Board of Governors. Finally, active management is exercised by the purchase and sale of individual securities and by repurchase transactions (repos).

Repurchase transactions (repos)

According to the investment strategy, the Nuclear Waste Fund may participate in the market for repurchase transactions (repos) for treasury bills and bonds (including index-linked bonds). A repo entails that the Fund sells treasury bills or bonds to a counterparty under an agreement to repurchase equivalent treasury bills or bonds at a later date at a certain agreed-upon price. Similarly, in the case of a reverse repo, the Fund purchases securities under an agreement on future resale at an agreed-upon price.

The purpose of repos is to achieve a higher return. According to the investment strategy, it is permitted to sell one or more securities under a repurchase agreement and deposit the proceeds in a sight deposit account in the National Debt Office or invest them on the repo market, provided that the reverse repo relates to a security that is permitted for investments.

Repo trading made a positive contribution to the Fund's return in 2016 as well.

Return

The nominal and real returns achieved during the past five years are shown in the following table.

Table 2: Nominal and real return, inflation (%)

Year	Nominal return ^{b)}	Inflation ^{b)}	Real return
2012	4.60	-0.10	4.70
2013	-0.57	0.10	-0.67
2014	10.69	-0.30	10.99
2015	-0.52	0.10	-0.62
2016	5.76	1.70	4.06
Average per year^{III)}	3.91	0.30	3.60

The nominal returns achieved for the standard portfolio in relation to the comparison index during the past five years are shown in the following table.

Table 3: Nominal and active return, comparison index (%)

Year	Nominal return ¹⁾	Comparison index ²⁾	Active return ³⁾
2012	4.60	2.50	2.10
2013	-0.57	-1.36	0.79
2014	10.69	10.72	-0.03
2015	-0.52	0.39	-0.91
2016	5.76	5.01	0.75
Average per year⁴⁾	3.91	3.37	0.54

¹⁾ The nominal return consists of the sum of realized and unrealized value changes in the investments plus interest received (including inflation compensation on index-linked investments).

²⁾ The percentage change in the consumer price index reported by SCB for the past 12 months is used as a measure of the rate of inflation.

³⁾ Calculated as the geometric mean of the annual values.

⁴⁾ 30% OMRX REAL and 70% OMRX BOND from 1 Jan. 2011. 30% OMRX REAL and 70% OMRX BOND from 1 Jan. 2014. The index includes index-linked and fixed-income treasury bonds.

⁵⁾ Return above comparison index.

As is evident from Table 2, the nominal return in 2016 amounted to 5.76 percent. Inflation was 1.70 percent. The real return was thereby 4.06 percent. As an annual average, the real return over the past five-year period amounted to 3.60 percent.

As is evident from Table 3, the active return in 2016 amounted to 0.75 percent and during the past five-year period to an average of 0.54 percent per annum.

The goal set by the Board for active return was an average of 0.25 percent per annum during rolling five-year periods up until 2013. Starting in 2014, the goal for active return is an average of 0.50 percent per annum during rolling five-year periods. The average goal for active return during the five-year period 2012 – 2016 is thereby 0.40 percent.

The goal for active return during the five-year period has thus been exceeded by 0.14 percentage point.

Liquidity planning

The Financing Ordinance (Section 19) states that the Nuclear Waste Fund shall be managed to ensure satisfactory liquidity.

Due to the restrictions that apply to the investment activities, the overall liquidity risk in the investments is very low. Treasury bills and fixed-income treasury bonds normally have very good liquidity on the fixed-income market. Covered bonds have lower liquidity, but under normal market conditions their liquidity is nearly as good as that of fixed-income treasury bonds. The market for index-linked bonds is less liquid, however, and it therefore takes longer to cash them in.

Liquidity planning is done so that the Fund's cash on hand is always sufficient to meet planned disbursements.

Summary assessment

Market rates fell during 2016, which led to revaluation gains on the bond holdings. A bond is valued by discounting all future cash flows generated by a bond (coupon rates and principal payments) to their present value using the current market rate as the discount rate. Lower market rates thus entail a higher market value for a bond.

The nominal return during 2016 was 0.75 percentage point higher than the comparison index. The positive active return in 2016 is mainly due to the fact that the Fund had an overweight in covered mortgage bonds. The interest rate differential between covered mortgage bonds and treasury bonds has decreased during the year, which, together with the higher return in mortgage bonds, has had a positive effect on the result.

The goal for active return during the past five-year period has been achieved.

As mentioned previously, the goal is – taking into account the restrictions imposed by the Government on the investment activities – to achieve the highest possible real return on the managed capital. The real return (i.e. the nominal return less inflation) was 3.60 percent per annum on average during the past five-year period.

All in all, the Board judges that the management result for the five-year period is good, particularly considering the investment restrictions imposed on the Fund.

Payments to the Fund

According to its terms of reference, the Fund shall receive the fees that are paid under the Financing Act and the Studsvik Act. The fees for reactor owners are calculated in relation to the energy that is delivered and are determined annually by the Government based on a recommendation by SSM¹. The recommended fee is based on Svensk Kärnbränslehantering AB's and SSM's own cost calculations. A fixed amount in kronor is set for the nuclear power plant in Barsebäck, which is no longer in operation.

SSM has also set a fixed fee for the other fee-liable licensees. During 2016, one of these, Studsvik Nuclear AB (SNAB), turned over certain licensed activity to a company called Cyclife Sweden AB (Cyclife). The Government has decided to transfer the licences under the Nuclear Activities Act for the activity in question to Cyclife. SSM has since decided to transfer 69.19 percent of SNAB's share in the Nuclear Waste Fund to Cyclife and determine new nuclear waste fees for the two companies. Fees paid in from other fee-liable licensees in accordance with Table 6 below correspond to the set fixed fees.

The variable fees were as follows (öre/kWh):

Table 4: Fees

(öre/kWh)	2016	2015	2014
Forsmarks Kraftgrupp AB	3.9	3.9	2.1
OKG AB (Oskarshamn)	4.1	4.1	2.0
Ringhals AB	4.2	4.2	2.4
Studsvik Act	0.3	0.3	0.3

The following table shows how much energy was delivered.

Table 5: Electricity delivered

TWh (=1,000,000,000 kWh)	2016	2015	2014
Forsmarks Kraftgrupp AB	24.0	21.1	25.3
OKG AB (Oskarshamn)	13.6	12.1	12.3
Ringhals AB	22.9	21.1	24.6
Total	60.5	54.3	62.2

The Fund has received the following amounts.

Table 6: Fees paid in

(SEK thousand)	2016	2015	2014
Forsmarks Kraftgrupp AB	935,383	823,978	531,824
OKG AB (Oskarshamn)	558,620	498,001	245,771
Ringhals AB	963,424	885,181	590,250
Barsebäck Kraft AB	1,042,000	1,042,000	842,000
Vattenfall AB (Ågesta)	49,354	49,354	49,354
Westinghouse Electric AB	3,687	3,687	3,687
Ranstad Mineral AB	81	81	81
Studsvik Nuclear AB	882	1,383	1,383
Cyclife Sweden AB	501	0	0
Chalmers TH AB	78	78	78
Total acc. to Financing Act	3,554,010	3,303,743	2,264,429
Acc. to Studsvik Act	181,643	163,021	186,622
Total	3,735,653	3,466,764	2,451,051

Disbursements from the Fund

The Nuclear Waste Fund disburses money from the Fund. But it is SSM that examines and decides how and to what extent Fund assets may be used to pay the costs reactor owners and other fee-liable licensees are expected to incur during a given future time period.²

SSM also examines to what extent Fund assets should be used to reimburse a municipality for information costs under the Financing Act. Such reimbursement may not exceed SEK 10 million per municipality and 12-month period for municipalities where a facility for final disposal of spent nuclear fuel is planned or being built.

SSM also examines questions regarding to what extent Fund assets should be used for support to non-profit organizations under the Financing Act. Such support may be provided in an amount not in excess of SEK 2.5 million per organization and calendar year and in a total amount not in excess of SEK 3.5 million per calendar year.

The Government decides on disbursement of money from the Fund to state authorities to cover certain costs for research and development, supervision, case management, asset management etc. as stipulated in the Financing Act.

² Under the Ordinance (2008:715) on Financial Measures for the Management of Waste Products from Nuclear Activities.

¹ Government decision 18/12 2014, M2014/2227/Ke

Disbursements have been made from the Fund in the following amounts.

Table 7: Disbursements

(SEK thousand)	2016	2015	2014
Forsmarks Kraftgrupp AB	394,343	428,405	345,686
OKG AB (Oskarshamn)	294,442	312,270	252,242
Ringhals AB	434,553	443,904	351,403
Barsebäck Kraft AB	262,771	232,274	168,226
State authorities	64,106	63,577	52,249
Municipalities	11,850	6,121	11,637
Non-profit organizations	3,363	3,470	3,324
Vattenfall AB (Ågesta)	8,712	4,308	3,871
Westinghouse	0	4,200	0
Total acc. to Financing Act	1,474,140	1,498,529	1,188,638
Acc. to Studsvik Act	259,926	229,171	150,369
Total	1,734,067	1,727,700	1,339,008

More detailed information on disbursements is provided in Note 7 to the Income Statement.

Change in the Fund

The fair value (market value) of the Nuclear Waste Fund increased in 2016 by SEK 5,333,424 thousand to SEK 64,617,664 thousand.

The change consisted of the following components.

Table 8: Change in the Fund

(SEK thousand)	2016	2015	2014
Fees paid in	3,735,653	3,466,764	2,451,051
Financial income	1,602,740	1,723,322	1,684,175
Financial expenses	-17,602	-867	-668
Unrealized change in value ³	1,758,617	-2,065,934	3,778,890
Disbursement of reimbursements/subsidies	-1,734,067	-1,727,700	-1,339,008
Operating expenses	-11,917	-11,419	-11,217
Total	5,333,424	1,384,166	6,563,224

³ Unrealized change in value is included in financial expenses and income in the Income Statement.

Distribution among fee-liable licensees

According to the Fund's terms of reference, the annual accounts shall be prepared in such a manner that they show how large a proportion of the Fund's assets accrues to each reactor owner and every other fee-liable licensee.

The Fund has decided to use the same method as that employed for mutual funds to keep track of each reactor owner's and other fee-liable licensee's share in the Fund. In brief, this method entails the following:

- A nominal share value was calculated at the start and each fee-liable licensee was allotted the number of shares that corresponded to the fee-liable licensee's balance at the time the new management rules were adopted.
- The market value (balance) of the Fund is determined daily. The market value of the Fund's assets is divided by the number of outstanding shares to obtain the current share value.
- Fee payments and disbursements relating to a fee-liable licensee are made in the form of "purchases/redemptions" of shares at the current share value. When a fee payment is made, the fee-liable licensee's number of shares increases, and when a disbursement is made it decreases.
- The market value of each fee-liable licensee's stake in the Fund is calculated by multiplying the current number of shares held by the reactor owner by the current share value. The distribution of the Fund among the fee-liable licensees is calculated by dividing the number of shares held by a given reactor owner by the total number of outstanding shares.
- The rate of return for a given period is calculated by measuring the change in the share value during the period.

The distribution of the fair value (market value) of the Fund among the fee-liable licensees at the end of each year was as follows.

Table 9: Fair value of the Fund per fee-liable licensee

(SEK thousand)	2016	2015	2014
Forsmarks			
Kraftgrupp AB	18,489,119	17,018,517	16,608,973
OKG AB (Oskarshamn)	13,040,508	12,115,332	11,967,716
Ringhals AB	20,132,890	18,589,948	18,259,842
Barsebäck Kraft AB	11,391,738	10,065,444	9,322,162
Vattenfall AB (Ågesta)	298,621	245,441	206,635
Westinghouse Electric AB	24,829	20,093	20,775
Ranstad Mineral AB	2,268	2,074	2,006
Studsvik Nuclear AB	3,176	7,079	5,757
Cyclife Sweden AB	5,652	0	0
Chalmers TH AB	308	219	144
Total market value acc. to Financing Act	63,389,109	58,064,147	56,394,012
Market value acc. to Studsvik Act	1,186,908	1,200,114	1,481,410
Adjustment of difference between market value and fair value			
	-12,269	-5,286	4,323
Undistributed assets and liabilities			
	53,916	25,265	20,329
Total fair value	64,617,664	59,284,240	57,900,074

The difference between market value and fair value consists of interest accrued between the balance sheet date (31 Dec. 2016) and the settlement date. The market value of interest-bearing financial instruments includes such accrued interest

The undistributed amount consists of items that have not, at the closing of accounts, been distributed among the licensees and the Studsvik fund in the form of fund shares. The amount includes accrued revenue and costs for the fourth quarter of each year and the balance in the Fund's interest-bearing account for payments and disbursements

Basis for calculating the fee

According to the Financing Ordinance (Section 46), the Fund shall furnish information annually to SSM concerning what fees have been received for the latest calendar year, the Fund balance and the expected return on the Fund assets. The Fund has provided this information to SSM.

Guarantees

According to the Financing Act and the Financing Ordinance, the holder of a licence to own or operate a nuclear facility that gives or has given rise to residual products shall also provide guarantees. The

reactor owner shall provide acceptable guarantees to the Nuclear Waste Fund corresponding to the financing and supplementary amounts determined by the Government. Other fee-liable licensees shall provide equivalent guarantees for the financing amount determined by SSM.

The financing and supplementary amounts determined by the Government and SSM for the reactor owners and other licensees are presented below.

The financing amount is intended to compensate for the current deficit in the Nuclear Waste Fund, assuming that no further nuclear waste fees are paid in. This deficit is calculated as the difference between the expected basic and extra costs and the funds that have been set aside for these costs at the time of the calculation.

The supplementary amount constitutes a guarantee for deficits that can arise as a result of unplanned events. The supplementary amount thereby takes into account possible additional basic costs, allowing for a suitable uncertainty interval around the expected outcome for the costs. This type of guarantee is determined by the Government and is pledged only by reactor owners.

The Government determines the size of the guarantees annually on the basis of a recommendation by SSM. The Government further decides which types of guarantees are acceptable, based on a pronouncement by the National Debt Office.

According to the Financing Ordinance, the guarantees shall be managed by the National Debt Office.

The Government has decided on the following financing and supplementary amounts for the reactor owners for 2015 – 2017⁴.

Table 10: Guarantee amounts per reactor owner

(SEK thousand)	Financing amount	Supplementary amount
Forsmarks Kraftgrupp AB	5,929,000	2,732,000
OKG AB	5,831,000	2,178,000
Ringhals AB	6,720,000	3,012,000
Total	18,480,000	7,922,000

All reactor owners have presented proposals for guarantees. The National Debt Office submitted a statement of opinion to the Government concerning the proposed guarantees, and the Government decided in 2015 to approve the proposals. The reactor owners

⁴ Government decision I:15, 18/12 2014, M2014/2227/Ke

then pledged guarantees in accordance with the financing and supplementary amounts decided on by the Government for the period 2015–2017.

SSM has decided on the following financing amounts for other fee-liable licensees for the period 2014–2016⁵. For 2016, SSM has decided on a changed financing amount for Studsvik Nuclear AB. At the same time, the following amounts were set for the new fee-liable licensee Cyclife AB⁶. The period for Barsebäck Kraft AB is 2015–2017.

Table 11: Guarantee amounts per licensee

(SEK thousand)	Financing amounts	Guarantees
Chalmers University of Technology	1,622	1,622
Ranstad Mineral AB	237	237
Studsvik Nuclear AB	7,591	15,853
Cyclife Sweden AB	19,971	19,971
Vattenfall AB (Ågesta)	144,338	144,338
Westinghouse Electric Sweden AB	70,216	70,216
Barsebäck Kraft AB	3,049,000	3,049,000
Total	3,292,975	3,301,237

All six of the other licensees and Barsebäck Kraft AB have submitted proposals for guarantees to the National Debt Office. The proposed guarantees have been approved by the National Debt Office and pledged by the licensees. The guarantee for Barsebäck Kraft AB has been approved by the Government and pledged by the licensee.

Investigation proposals

In October 2011, the Government commissioned SSM to conduct, in consultation with the National Debt Office, a review of the Financing Ordinance. The review was supposed to cover questions relating to calculation of fees and the need for risk provisions.

In December 2011, the Government further commissioned SSM to conduct, in consultation with the National Debt Office, a review of the Financing Act, including relevant parts of the Financing Ordinance. The review was supposed to cover questions relating to guarantees as well as a broadening of the Nuclear Waste Fund's investment rules, particularly with respect to effects on the risk incurred by the state, fee

levels and the need for guarantees.

During 2012 and 2013, the Nuclear Waste Fund has participated actively in SSM's investigation via its representation in the project's steering group and working group.

The investigation was concluded with a report to the Government in early June 2013. The report was referred for consideration and comment together with a memorandum on regulatory responsibility in the financing system prepared by the Ministry of the Environment. The Government has not yet arrived at a standpoint regarding the proposals in the report and the memorandum.

In a communication to the Government in June 2015, the Nuclear Waste Fund brought the attention of the Government to the fact that the Fund's expected return will in all probability be low for the next few years as a consequence of the low interest rate level. The Fund contended that the changed market situation had made it more urgent that the Fund be permitted to invest in more asset classes than at present.

In a communication to the Government in January 2016, the Nuclear Waste Fund submitted proposals for changes in the Financing Ordinance. The proposal entailed that the Nuclear Waste Fund be allowed to invest the Fund's assets in other interest-bearing financial instruments than those issued by the National Debt Office or issued in accordance with the Covered Bonds Issuance Act (2003:1223). It should also be possible to invest in mutual funds or foreign funds that have restricted their investment strategy to investments permitted for the Nuclear Waste Fund.

It is evident from the Government's list of bills for the spring of 2017 that the Government intends to present a bill to the Riksdag by no later than 21 March proposing rules for the financing of nuclear waste management. The aim is that the bill should be treated by the Riksdag before the summer.

The Energy Commission's opinion as expressed in its report "Kraftsamling för framtidens energi" ("Gathering strength for our energy future," in English) is that the rules governing the Nuclear Waste Fund's investments should be changed to broaden the investment options from the start of the next fee period in 2018.

⁵ Decision by SSM on 19/6 2014 and 15/1 2015

⁶ Decision by SSM on 3/11 2016

Income statement

(SEK thousand)	Note	2016	2015
Operating expenses			
Costs for personnel	1	-313	-279
Other running costs	2	-11,604	-11,139
Total		-11,917	-11,419
Result of operations		-11,917	- 11,419
Transfers			
Other funds obtained for financing of subsidies	3	3,735,653	3,466,764
Financial income	4	3,361,357	1,723,322
Financial expenses	5	-17,602	-2,066,801
Provision to reserves for transfer purposes	6	-5,333,424	-1,384,166
Subsidies paid	7	-1,734,067	-1,727,700
Balance		11,917	11,419
Change in capital for the year		0	0

Balance sheet

(SEK thousand)	Note	31/12 2016	31/12 2015
ASSETS			
Long-term investments			
Other securities held as non-current assets	8	61,668,673	55,453,472
Total		61,668,673	55,453,472
Current receivables			
Receivables from other government agencies		6	3
Total		6	3
Accruals and deferrals			
Prepaid expenses	9	28	28
Other accrued revenue	10	781,783	1,734,963
Total		781,810	1,734,991
Short-term investments			
Securities and interests	11	116,002	6,107
Total		116,002	6,107
Cash and bank balances			
Balance in interest-bearing account at National Debt Office		58,370	29,234
Other balances at National Debt Office	12	1,998,789	2,195,889
Cash and bank balances		-112	27
Total		2,057,047	2,225,150
Total assets		64,623,538	59,419,723
CAPITAL AND LIABILITIES			
Reserves			
Nuclear Waste Fund	13	64,617,664	59,284,240
Total		64,617,664	59,284,240
Liabilities etc.			
Current liabilities to other government agencies	14	53	1,237
Trade payables		0	3
Other current liabilities	15	1,387	131,508
Total		1,440	132,748
Accruals and deferrals			
Accrued expenses	16	4,434	2,735
Total		4,434	2,735
Total capital and liabilities		64,623,538	59,419,723

Cash flow statement

(SEK thousand)	Note	2016	2015
Operations			
Expenses		-11,917	-11,419
Increase (-) in current receivables		-3	-2
Increase (+) in current liabilities		39	0
Cash flow to operations		-11,881	-11,421
Investments			
Investments in financial assets		-18,661,271	-14,710,039
Total investment expenditures		-18,661,271	-14,710,039
Financing of investments			
Sale of non-current assets		13,507,668	10,849,137
Return (excl. unrealized gains and losses)		2,009,589	2,192,875
Total funds provided for financing of investments		15,517,257	13,042,013
Change in current receivables and liabilities		31,610	28,315
Cash flow to investments		-3,112,404	-1,639,712
Transfer activities			
Subsidies paid		-1,734,067	-1,727,700
Change in current receivables from fee-liable licensee		954,596	-405,778
Disbursements in transfer activities		-779,471	-2,133,479
Financing of transfer activities			
Other funds obtained for financing of subsidies		3,735,653	3,466,764
Total funds provided for financing of transfer activities		3,735,653	3,466,764
Cash flow from transfer activities		2,956,182	1,333,285
Change in cash and cash equivalents		-168,103	-317,847
Specification of change in cash and cash equivalents			
Cash and cash equivalents at start of year		2,225,150	2,542,998
Increase in cash and bank balances		-139	26
Decrease in balance with National Debt Office		-167,964	-317,873
Total change in cash and cash equivalents		-168,103	-317,847
Cash and cash equivalents at year-end		2,057,047	2,225,150

Additional disclosures and notes

Amounts in thousands of kronor unless otherwise stated. Summation differences may occur due to rounding-off.

Additional disclosures

Accounting policies

The authority's accounts comply with generally accepted accounting principles and the annual accounts have been prepared in accordance with the Ordinance (2000:605) on Annual Accounts and Budgets as well as the Swedish National Financial Management Authority's (ESV) guidelines (ESV 1998:7) on accounting for funds and provisions in government agencies. In response to a question from the Nuclear Waste Fund, ESV has also issued guidelines for accounting of repos with repurchase agreements in the annual accounts (ESV reg. no. 3.7-61/2017).

In the case of deposits in interest-bearing accounts, accrued interest is recognized as interest income in the Income Statement and as a cut-off item in the Balance Sheet.

In the case of fixed-income coupon investments, accrued interest is recognized as interest income in the Income Statement and as a cut-off item in the Balance Sheet.

Index-linked investments are revalued annually as described below.

- In the case of index-linked coupon investments, accrued interest including inflation compensation on the coupon rate is recognized as interest income in the Income Statement and as a cut-off item in the Balance Sheet. Accrued inflation compensation on invested capital is recognized as interest income in the Income Statement and as revaluation of the carrying amount in the Balance Sheet.

In accordance with ESV's guidelines, net accounting per counterparty is applied from 2016 for repurchase transactions (repos), since

- they involve the same counterparty,
- receivables and liabilities amount initially to the same market value, and
- settlement of receivables and liabilities takes place simultaneously.

Accordingly, the comparison figures for 31 Dec. 2016 have been adjusted as follows (amounts in SEK thousand):

- Securities and interests + 6,107
- Other liabilities + 6,107

Net receivables relating to repos have been reclassified in the Balance Sheet from "Other receivables" to "Short-term investments". There has been no change for net liabilities relating to repos, since there is no corresponding item.

Valuation principles

As from 2015, the Fund's financial instruments are measured at fair value in accordance with Chap. 5 Sec. 13 of the Ordinance on Annual Accounts and Budgets, since they are primarily held to generate return or increases in value. The financial instruments are measured individually.

Remuneration and other benefits
Board members and other Board assignments

(SEK thousand)	Remuneration
Daniel Barr, Chairman	
- No other Board assignments	72
Lena Johansson, Vice Chairman	
- Svenska ICC Service AB	
- National Veterinary Institute (SVA)	33
Sara Bergström	
- Vinnova's programme council for financial market research	28
Malin Björkmo	
- Handelsbanken Fonder AB	
- Björkum Advisors AB	
- Eggum Invest AB	
- Third AP Fund	
- Falck Försäkringsaktiebolag	25
Malin Dahlroth	
- Sydkraft AB	
- Sydkraft Thermal Power AB	
- Sydkraft Nuclear Power AB	
- Sydkraft Hydropower AB	
- Sydkraft Försäkring AB	25
Johan Gyllenhoff	
- Försäkringsbolaget Vattenfall Insurance	
- Vattenfall Reinsurance S.A	28
Thomas Hahn (until 31 Dec. 2016)	
- Sveaskog AB	24
Björn Österberg (from 1 Jan. 2017)	
- No other Board assignments	-
Total fees	211

Notes

(SEK thousand)

	2016	2015
Note 1		
Costs for personnel		
Fees	-235	-210
Other personnel costs	-78	-69
Total personnel costs	-313	-279
Note 2		
Other operating expenses		
Services, intrastate	-11,428	-10,998
Other operating expenses	-176	-141
Total operating expenses	-11,604	-11,139
Note 3		
Other funds obtained for financing of subsidies		
Fee acc. to Financing Act		
Forsmarks Kraftgrupp AB	935,383	823,978
OKG AB (Oskarshamn)	558,620	498,001
Ringhals AB	963,424	885,181
Barsebäck Kraft AB	1,042,000	1,042,000
Vattenfall AB (Ågesta)	49,354	49,354
Studsvik Nuclear AB	882	1,383
Cyclife Sweden AB	501	0
Westinghouse Electric Sweden AB	3,687	3,687
Ranstad Mineral AB	81	81
Chalmers University of Technology	78	78
Total fee acc. to Financing Act	3,554,010	3,303,743
Fee acc. to Studsvik Act	181,643	163,021
Total other funds obtained etc.	3,735,653	3,466,764
Fees are paid by the reactor owners in relation to the energy delivered. Fee per reactor owner and energy delivered is shown by Tables 4 and 5 in the presentation of results. Other fee-liable licensees pay a fixed fee.		
Note 4		
Financial income		
<i>Interest income on investments etc.</i>		
Interest-bearing account for payments and disbursements	-135	-130
Sight deposit account	-5,313	-6,121
Fixed-income investments	821,665	1,268,723
Index-linked investments	-109,092	-132,310
Repo transactions	38,206	29,013
Total	745,331	1,159,175

Cont'd. Note 4	2016	2015
Capital gains	857,409	564,147
Unrealized change in value	1,758,617	0
Total financial income	3,361,357	1,723,322
<hr/>		
Note 5	Financial expenses	
National Debt office, account charges	-131	-37
SE-Banken, custody account charge	-492	-517
Total interest expenses	-623	-554
Capital losses	-16,980	-314
Unrealized change in value	0	-2,065,934
Total financial expenses	-17,602	-2,066,801
<hr/>		
Note 6	Provision to reserves for transfer purposes	
Costs for personnel	-313	-279
Other operating expenses	-11,604	-11,139
Other funds obtained for financing of subsidies	3,735,653	3,466,764
Financial income	3,361,357	1,723,322
Financial expenses	-17,602	-2,066,801
Subsidies paid	-1,734,067	-1,727,700
Total provision to reserves	5,333,424	1,384,166
Provision to Nuclear Waste Fund	-5,333,424	-1,384,166
Balance	0	0
<hr/>		
Note 7	Subsidies paid	
Reimbursement to reactor owners etc.		
Forsmarks Kraftgrupp AB	-394,343	-428,405
OKG AB (Oskarshamn)	-294,442	-312,270
Ringhals AB	-434,553	-443,904
Barsebäck Kraft AB	-262,771	-232,274
Vattenfall AB (Ågesta)	-8,712	-4,308
Westinghouse	0	-4,200
Total acc. to Financing Act	-1,394,821	-1,425,361
Acc. to Studsvik Act	-259,926	-229,171
Total reimbursement to reactor owners etc.	-1,654,747	-1,654,532
Others subsidies paid		
<i>Support to NGOs</i>		
Swedish Environmental Movement's		
Nuclear Waste Secretariat	-925	-925
Swedish Renewable Energies Association	-150	-150
Swedish NGO Office for Nuclear Waste Review	-2,288	-2,395
Total	-3,363	-3,470

Cont'd. Note 7	2016	2015
<i>Reimbursement to municipalities</i>		
Oskarshamn Municipality	-2,509	-2,577
Östhammar Municipality	-8,790	-5,349
Regional Council in Uppsala County	-485	-1,350
Regional Council in Kalmar County	-566	-503
Total	-12,350	-9,779
<i>Reimbursement to other government agencies</i>		
Uppsala County Administrative Board	-643	-256
Swedish Radiation Safety Authority	-54,716	-58,399
National Debt Office	-3,384	-846
Government Offices/Swedish National Council for Nuclear Waste	-5,413	-4,274
Total	-64,156	-63,775
<i>Reversal</i>		
Regional Council in Uppsala County	142	272
County Administrative Board in Uppsala County	50	198
Östhammar Municipality	0	3,386
Regional Council in Kalmar County	358	0
Total	550	3,856
Total other subsidies paid	-79,320	73,168
Total subsidies paid	1,734,067	1,727,700

Note 8	Other securities held as non-current assets			
Fixed-income investments	Coupon rate	Market rate	Nominal value	Fair value⁵
Treasury bonds				
SO1059	1.00	0.54	2,338,000	2,444,083
SO1057	1.50	0.12	1,540,000	1,688,700
SO1056	2.25	1.14	440,000	514,405
SO1058	2.50	0.32	928,000	1,109,269
SO1053	3.50	1.50	2,655,000	3,725,523
Total treasury bonds			7,901,000	9,481,980
Covered bonds				
CAIO1584	1.50	0.45	900,000	950,078
CAIO1585	1.50	0.66	650,000	676,907
CAIO 2006	1.81	1.60	100,000	101,903
CAIO1582	2.50	-0.02	310,000	333,449
CAIO1581	3.00	-0.22	325,000	345,987
CAIO1583	4.25	0.21	2,237,000	2,599,203
CAIO1586	4.50	0.89	3,162,000	3,834,478

Cont'd. covered bonds

Fixed-income investments	Coupon rate	Market rate	Nominal value	Fair value⁵
Landshypotek 211025	0.38	0.70	300,000	295,604
Landshypotek 240829	2.20	1.46	300,000	318,178
Landshypotek 180427	2.63	-0.24	230,000	242,841
Landshypotek 171130	2.80	-0.25	110,000	113,342
Landshypotek 231113	3.20	1.28	1,100,000	1,242,448
Landshypotek 390330	3.50	2.77	100,000	114,618
Landshypotek Bank 200617	0.63	0.31	250,000	253,540
LF Hypotek 514	1.75	0.62	457,000	483,170
LF Hypotek 515	2.25	0.93	1,250,000	1,349,284
LF Hypotek 512	2.50	-0.08	1,100,000	1,184,847
LF Hypotek 358	3.10	1.21	400,000	451,099
NBO 5531	1.00	0.76	1,891,000	1,927,851
NBO230215	1.56	0.96	300,000	314,736
NBO5530	2.25	-0.09	510,000	545,571
NBO5521	3.25	0.21	2,965,000	3,327,185
NBO5703	3.46	1.72	150,000	174,359
SEB573	1.50	0.21	200,000	210,516
SEB574	1.50	0.66	1,325,000	1,379,703
SEB572	3.00	-0.09	620,000	677,174
SEB 311020	3.38	2.30	310,000	353,413
SEB 578	4.25	0.94	117,000	143,240
SEB 594	4.50	2.62	193,000	256,905
SPIO 360922	3.13	2.61	396,000	430,463
SPIO189	1.00	0.37	400,000	410,120
SPIO188	3.75	-0.08	300,000	334,406
SPIO180	5.70	0.18	3,610,000	4,408,749
Covered bonds 200617	2.00	0.22	170,000	182,257
Covered bonds 260901	2.30	1.76	500,000	527,576
Covered bonds 311027	3.15	2.33	575,000	636,647
Covered bonds 231113	3.20	1.18	1,000,000	1,136,538
Covered bonds 190918	4.00	-0.02	140,000	156,876
Covered bonds 210317	1.00	0.46	100,000	103,022
Covered bonds 220615	1.25	0.84	600,000	617,185
Total covered bonds			29,653,000	33,145,470
Index-linked investments				
SSO3108	0.25	-1.83	2,375,000	2,720,450
SO3104	3.50	-1.09	2,552,000	5,039,381
SO3102	4.00	-2.03	3,148,000	5,111,943
Inflation Linked Bond 3110	0.13	-2.10	2,012,000	2,155,790
Inflation Linked Bond 3112	0.13	-1.31	969,000	1,124,481
Inflation Linked Bond 3111	0.13	-0.66	594,000	685,988
Inflation Linked Bond 3109	1.00	-1.44	1,776,000	2,203,190
Total index-linked investments			13,426,000	19,041,224

Cont'd. Note 8

Total other securities held as non-current assets 31/12 2016	50,980,000	61,668,673
- Of which accrued interest		532,801
- Of which unrealized change in value		4,320,530
<i>Total other securities held as non-current assets 31/12 2015</i>	<i>47,078,000</i>	<i>55,453,472</i>
- Of which accrued interest		558,330
- Of which unrealized change in value		2,808,952

The fair value includes interest accrued up to the accounting date. Index-linked investments include inflation compensation.

Note 9	Prepaid expenses	31/12 2016	31/12 2015
	Sitevision	28	28
	Total prepaid expenses	28	28

Note 10	Other accrued revenue		
	<i>Accrued fees from fee-liable licensees</i>		
	Forsmarks Kraftgrupp AB	238,425	186,636
	OKG AB (Oskarshamn)	141,983	135,906
	Ringhals AB	294,229	270,352
	Barsebäck Kraft AB	0	1,042,000
	Acc. to Studsvik Act	49,746	43,612
	Vattenfall AB (Ågesta)	49,354	49,354
	Studsvik Nuclear AB	882	1,383
	Cyclife Sweden AB	501	0
	Westinghouse Electric AB	3,687	3,687
	Ranstad Mineral AB	81	81
	Chalmers TH AB	78	78
	Total prepaid expenses	778,966	1,733,089

The fees are paid by the reactor owners in arrears, within one month of the end of the quarter. Barsebäck Kraft AB and other fee-liable licensees pay a fixed annual fee in arrears. Barsebäck Kraft AB paid the fee for 2016 before the end of the year.

	<i>Accrued interest income on investments</i>		
	Repos	2,833	1,886
	National Debt Office	-16	-12
	Total	2,817	1,874
	Total other accrued revenue	781,783	1,734,96

Note 11	Securities and interests		
	Receivable repos – Danske bank	0	25,053,762
	Liability repos – Danske bank	0	-25,047,964
	Net receivable repos – Danske bank	0	5,798

Cont'd. Note 11		31/12 2016	31/12 2015
	Receivable repos – Nordea	5,884,107	3,523,444
	Liability repos – Nordea	-5,883,636	3,523,135
	Net receivable repos – Nordea	471	309
	Unrealized change in value repos	115,532	0
	Total securities and interests	116,002	6,107
<hr/>			
Note 12	Other balances at National Debt Office		
	National Debt Office sight deposit account	1,998,789	2,195,889
	Total other balances at National Debt Office	1,998,789	2,195,889
<hr/>			
Note 13	Nuclear Waste Fund		
	Fair value at year-end	64,617,664	59,284,240
		2016	
		Number of shares	
	Of which acc. to Financing Act		
	<i>Forsmarks Kraftgrupp AB</i>		
	Value of Fund shares	52,475,235.14	18,250,694
	Accrued fees	238,425	186,636
	<i>OKG AB (Oskarshamn)</i>		
	Value of Fund shares	37,086,433.79	12,898,525
	Accrued fees	141,983	135,906
	<i>Ringhals AB</i>		
	Value of Fund shares	57,041,033.50	19,838,661
	Accrued fees	294,229	270,352
	<i>Barsebäck Kraft AB</i>		
	Value of Fund shares	32,754,050.47	11,391,738
	Accrued fees	0	1,042,000
	<i>Chalmers TH AB</i>		
	Value of Fund shares	661.34	230
	Accrued fees	78	78
	<i>Westinghouse Electric AB</i>		
	Value of Fund shares	60,788.96	21,142
	Accrued fees	3,687	3,687
	<i>Vattenfall AB (Ågesta)</i>		
	Value of Fund shares	716,704.78	249,267
	Accrued fees	49,354	49,354
	<i>Ranstad Mineral AB</i>		
	Value of Fund shares	6,287.04	2,187
	Accrued fees	81	81
	<i>Studsvik Nuclear AB</i>		
	Value of Fund shares	6,594.51	2,294
	Accrued fees	882	1,383
	<i>Cyclife Sweden AB</i>		
	Value of Fund shares	14,809.28	5,151
	Accrued fees	501	0
	Total acc. to Financing Act	180,162,598.81	63,389,109
			58,064,147

Cont'd. Note 13	2016 <i>Number of shares</i>	31/12 2016	31/12 2015
Of which acc. to Studsvik Act			
Value of Fund shares	3,269,621.82	1,137,162	1,156,503
Accrued fees		49,746	43,612
Total Acc. to Studsvik Act	3,269,621.82	1,186,908	1,200,114
Total market value	183 432 220.63	64,576,017	59,264,261
Adjustment of difference between market value and fair value		-12,269	-5,286
Undistributed assets and liabilities at closing of accounts		53,916	25,265
Total fair value		64,617,664	59,284,240

The value of Fund shares is based on the market value of the Fund's investments in financial instruments, sight deposits and accrued interest income on such investments. Accrued fees will be invested in new shares when payments are remitted to the Fund. The undistributed amount consists mainly of certain accrued revenue and costs for the fourth quarter of each year and the balance in the Fund's interest-bearing account for payments and disbursements. The share value at 31 December 2016 (SEK 347.80) is measured in accordance with the market valuation principle (Handels NAV, Net Asset Value).

The fair value for 31 Dec. 2016 includes accumulated unrealized change in value of long-term investments including repos in the amount of SEK 4,436,061 thousand. The comparison value for 31 Dec. 2015 includes accumulated unrealized change in value of long-term investments including repos in the amount of SEK 2,677,444 thousand.

Note 14	Current liabilities to other government agencies	31/12 2016	31/12 2015
	National Audit Office	17	39
	Swedish National Tax Board	36	38
	Swedish National Council for Nuclear Waste	0	1,160
	Total liabilities to other government agencies	53	1,237

Note 15	Others	31/12 2016	31/12 2015
	Liability repos – Danske bank	27,404,511	0
	Receivable repos – Danske bank	-27,403,187	0
	Net liability repos - Danske bank	1,324	0
	Liability repos – SEB	708,283	0
	Receivable repos – SEB	-708,220	0
	Net liability repos – SEB	63	0
	Unrealized change in value repos	0	131,508
	Total other liabilities	1,387	131,508

Note 16	Accrued expenses	31/12 2016	31/12 2015
	Government Offices/Swedish National Council for Nuclear Waste	1,631	0
	National Audit Office	50	80
	Kammarkollegiet	2,750	2,655
	Others accrued expenses	3	0
	Total accrued expenses	4,434	2,735

Signatures

The Nuclear Waste Fund's 2016 annual accounts were adopted at a Board meeting on 15 February 2017.

We certify that the annual accounts give a true and fair view of the results of operations and of costs, revenue and the financial position of the authority

Daniel Barr
Chairman

Lena Johansson
Vice Chairman

Sara Bergström

Malin Björkmo

Malin Dahlroth

Johan Gyllenhoff

Björn Österberg

