

## **3 FOREWORD**

### 5 WHO ARE WE?

## **7 BUSINESS AREAS**

Electricity	8
Water	10
Heating	12
Management - Digitsation	16
Riskmanagement	28

20	SO	CIA	T DI	CODC	ITOTAL	BILITY
40	30	CIA	ъκі	LOPU	TIOIT	211111

## 24 NUKISSIORFIIT FROM THE INSIDE

## **26 MAIN AND KEY FIGURES**

## **37 MANAGEMENT ENDORSEMENT**

## 28 INDEPENDENT AUDITORS REPORT

## **31 FINANCIAL STATEMENT**

## **33 ACCOUNTING POLICIES**

### **36 INCOME STATEMENT**

### **37 BALANCE SHEET**

## **38 CASH FLOW STATEMENT**

#### **39 NOTES**

### **50 APPENDIX 1**

Distribution Statement

## 53 APPENDIX 2

 $\mbox{ Diesel and CO}_{2} \mbox{ Accounts for Electricity} \\ \mbox{ and Heating Production}$ 



## FOREWORD

#### We have the energy

2022 was the year Nukissiorfiit returned to a more normal everyday life without Covid-19 restrictions.

However, it wasn't long before war in Ukraine became a new reality that left its mark on the year. With the war in Ukraine affecting supply chains globally, Greenland and Nukissiorfiit have also been affected. The war has entailed a greater focus on critical infrastructure, and with that a necessary increase in security efforts. Moreover, the war is also threatening price increases and delays for our suppliers. This particularly affects Nukissiorfiit's technical infrastructure, such as generators and transformers.

In 2022, Nukissiorfiit has focused on improving the existing infrastructure, enabling us to continuously enhance the stability and security of supply.

Among other things, Nukissiorfiit is working strategically on documented drinking water safety (DDS) to improve the country's water quality.

In addition, 2022 was the year when thorough-going digitalisation optimised processes, which means that Nukissiorfiit will be much more data-driven in the future. In this way, Nukissiorfiit is making the smartest investments, which will benefit Nukissiorfiit, and hence Greenlandic society, the most.

At the end of the year, Nukissiorfiit launched a new customer portal to support digitalisation and enhance the customer experience. The portal allows us to reduce waiting times and, more importantly, improve processing times.

In 2022, it was also decided that Nukissiorfiit will be responsible for the energy and water supply in Kangerlussuaq, Narsarsuaq and Qaarsut. Preparations to ensure a smooth transition, including for former Mittarfeqarfiit employees, have been a priority for Nukissiorfiit throughout the year.

Moreover, the decision to establish a board of directors for Nukissiorfiit was politically adopted in the autumn of 2022. Nukissiorfiit is now looking forward to working with the new board. Nukissiorfiit also hopes to welcome a new permanent CFO in 2023.

In 2023, the work on electrification and renewable energy will continue, enabling Nukissiorfiit to promote socio-economic and environmentally friendly interests, reduce Nukissiorfiit's dependence on oil, and thus limit  $\mathrm{CO}_2$  emissions. For Nukissiorfiit, the future of Greenland – and its citizens – is about creating a Nukissiorfiit in balance with nature, culture and the economy.

The past year and the year to come cannot be successful without the many talented employees of Nukissiorfiit. The country's stability of supply depends on competent technicians and other employees across the country who keep the waterworks and power plants running every day, ensuring that everyone in the country has a normal everyday life.

Furthermore, in early 2023, the Naalakkersuisut (Cabinet of Greenland) decided that the establishment of the new hydropower plant at Aasiaat/Qasigiannguit, as well as the expansion of the hydropower plant at Nuuk, should be transferred to

NunaGreen A/S. This also means that the existing Buksefjord hydropower plant will also be transferred to NunaGreen A/S. The framework for future collaboration has not yet been determined, but is expected to be in place by 2023. Nukissiorfiit retains responsibility for the operation of the Buksefjord hydropower plant, and for the operation of the new hydropower plant in Aasiaat/Qasigiannguit.

In 2023, Nukissiorfiit will intensify our focus on corporate social responsibility. Through education and greater involvement of local stakeholders, Nukissiorfiit will work to further develop the skills that are vital for Greenland to move towards a greener future.

Nukissiorfiit will lead the way in sustainable responsibility. Nukissiorfiit can only do this with the political will and through close partnerships.

For Nukissiorfiit, the future is green for the benefit of the current and future Greenlandic generations.

Cicilie Senderovitz
CEO, Director of Energy



## WHO ARE WE?

#### Our owners

Nukissiorfiit is a net-controlled company under the Ministry of Agriculture, Self-sufficiency, Energy and the Environment. The company is ultimately owned by society and its customers.

The 1997 Energy Supply Regulations and the 2007 Water Regulations set the framework for Nukissiorfiit to become the country's primary supplier of electricity, water and heat. Within the given framework, and taking the socio-economic conditions into account, Nukissiorfiit focuses on the robust supply and increased use of renewable energy technology and customer-efficient solutions. Nukissiorfiit's prices and terms of sale and delivery are approved by the Naalakkersuisut.

## The organisation

Nukissiorfiit employs 393 people on a daily basis. Nukissiorfiit is divided into six districts, which are responsible for supplying the respective towns and settlements:

District of Avanna

District of Ilulissat

District of Disko

District of Qegga

District of Nuuk

District of Kujalleq

The overall management and administration are located in Nuuk.



17
towns
52
villages

6,4% in training



23
distance
heating plants

**88**power stations
5 renovated in 2022



hydropower plants 91,3 MW

393 employees 20.000 customers



**69**waterworks
1 renovated in 2022

100%
receive water
from waterworks
with Documented
Drinking Water Safety



Sales

**Prices** 

253
millions kWh

1,65

5,1 millions m<sup>3</sup>

20 DKK/m³ 346
millions kWh

490-710

2,9%

days with boil water advisories



15 solar panels 620 kW

Result of the year

29,1 mio. kr. **Investments** 24,6% in the villages

**164**DKK mill.

Turnover

806,4

wind turbines 56 kW



71% hydropwer

3% waste

26% fossil fuels

softwarerobots
18 processes in operation, 6 new in 2020



47,7 mio. kr.



## ELECTRICITY

We supply the whole of Greenland with electricity for light and power.

In the period 2019 to 2022, there was an increase in electricity sales. During the period, sales have increased by almost 7%, and in 2022 a total of 234 million kWh of electricity was sold to consumers and industry. Sales have primarily increased in the three growth cities of Nuuk, Sisimiut and Ilulissat, which are all hydropower cities. The tariff for residential electricity has not been adjusted since 1 August 2019, but will be adjusted on 1 February 2023. For the fishing industry, the tariff was changed as of 1 October 2022.

Electricity for light and power accounted for approximately 55% of Nukissiorfiit's primary revenue in 2022.

## **Emergency supply**

Security of supply is the life blood of Nukissiorfiit. In order to maintain a high level of security of supply, both main and emergency supply systems are required in each locality. In 2022, there was a particular focus on the emergency supply systems and their capacity. This is partly due to the power cut in Nuuk at the end of 2021, but also because population growth in some cities requires larger backup facilities. To solve the problem of emergency power supply, the focus has been on containerised generators, which are an easily transportable solution in the event of a power cut at another location in the district. In addition, there have been improvements to switch-

ing stations on the emergency network and feasibility studies for a new emergency network.

#### General maintenance

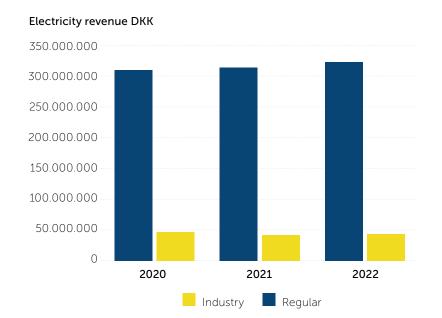
To maintain a high level of security of supply, continuous maintenance of the power plants is carried out, as well as new investments in plants. Maintenance of the plants involves changing oil, oil filters, fuel filters, wear parts, etc. In addition, maintenance has been carried out to switchboards and switches, as well as the CRM (Control, Regulation and Monitoring) technical IT system. Upgrading CRM systems improves the interaction between the various motor generators, switches and associated components, thereby reducing inconvenience to consumers and, in the longer term, providing a data basis for analysing and optimising the operation of the power plant.

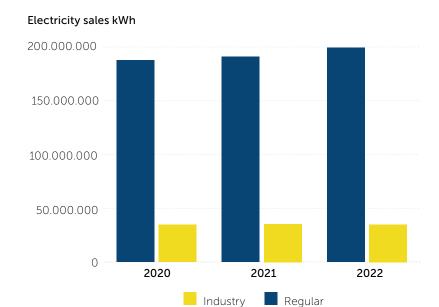
## Cables/switching stations

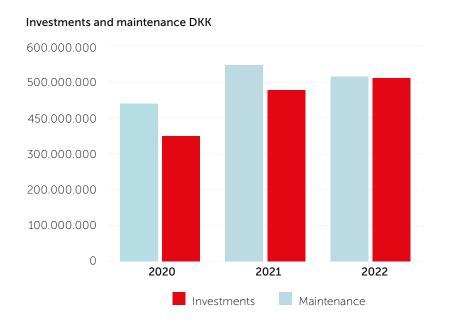
There have been several large projects involving cables and switching stations. As previously mentioned, switching stations have been improved on emergency power plants, and network stations have been installed, improved and expanded to supply new neighbourhoods. Long stretches of high-voltage cables have been laid in several places along the coast, while supply cables have been extended in new neighbourhoods.

The improvements ensure a continuous supply of power and electricity, while the expansions ensure that new neighbourhoods are supplied.

Maintenance funds of DKK 51.4 million were used during the year, in addition to our own hours worked. New investments of DKK 51.1 million have been made.







Regular is categorised as customer group 1, which is the standard uniform tariff that is politically adopted. Industry is categorised as customer group 2, and is only given to those fish factories that have applied and been approved to purchase at that price.

## WATER

## Nukissiorfiit supplies clean drinking water to the whole of Greenland.

5.1 million m3 of water was sold in 2022. The fishing industry's decrease for production purposes was 43%. Sales are largely unchanged compared with the previous year.

The fishing industry has decreased less, while other customers' consumption has increased.

Water revenue accounts for approximately 12% of Nukissiorfiit's primary revenue.

### **Emergency preparedness**

Security of supply is the life blood of Nukissiorfiit, which is why we have a strong focus on emergency preparedness. Emergency preparedness ensures the supply of water in the event of a breakdown at a waterworks. To maintain security of supply in the event of a waterworks failure, we have developed a mobile emergency water supply system that weighs less than 1 tonne. A mobile emergency water supply system can be hauled by helicopter, and costs approximately DKK 0.6 million. We expect the first mobile water supply system to be ready for use in the summer of 2023. It is expected that 5-8 systems will be procured across Greenland for rapid deployment as needed. The completed systems can supply consumers with clean drinking water within hours of a breakdown. The water supply system consists of a pump for seawater extraction, frost-proof raw wa-

ter hoses, a heat exchanger, a pre-filter, an RM system, a UV system and a clean water tank with associated pump-out.

#### Replacement of water mains

Another important event in the year was the replacement of worn-out water mains, which, due to discolouration of the drinking water, breakdowns or other reasons, had to be replaced with new, more durable and up-to-date materials.

### Replacement of water mains

The year has also seen the replacement of the water mains, which have needed new, more durable and up-to-date materials owing to discolouration of the drinking water, damage or other problems.

## Optimisation of operations and data

Nukissiorfiit has also focused on optimising the operation of several waterworks – both existing plants and the standard of new plants to be established in the coming years. This operational optimisation has been done by both systematically analysing collected data and looking at alternative materials and products for further development of the systems.

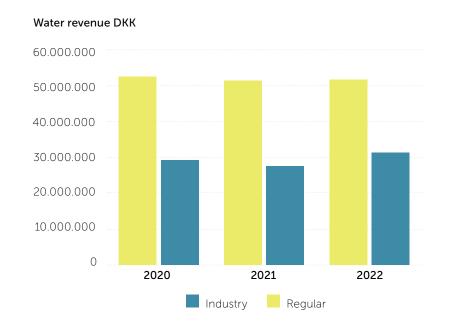
Nukissiorfiit's waterworks currently collect a lot of useful data in their monitoring systems, which is beneficial for the future development of the water supply. In practice, the operational optimisation means that the plants are set for production for as many hours as possible at a lower speed, to achieve the best filtration, UV lighting and water replacement in the clean water tanks.

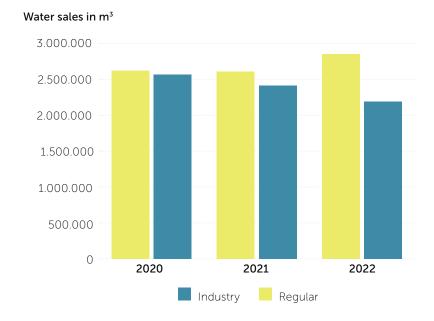
Instruction has been given on DDS (Documented Drinking Water Safety), which has been implemented at all Nukissiorfiit supply sites with the exception of the newly acquired areas in Kangerlussuaq, Narsarsuaq and Qaarsut. These locations will be reviewed during 2023.

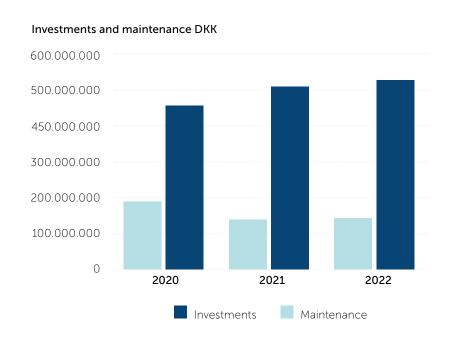
#### Renovation of winter water tanks

In 2022, Nukissiorfiit also secured the winter water supply in a number of settlements by renovating winter water tanks. The tanks are now lined with the same type of plastic used to make water pipes. With this optimisation, the winter water tanks are expected to have a long future lifespan.

A total of DKK 14.3 million was spent on major and minor maintenance work within the approved budget, in addition to our own hours. Investments have been made in the amount of DKK 52.8 million.







# HEATING

Nukissiorfiit supplies district and electric heating in nine towns in Greenland, and interruptible district heating to individual customers in another five towns and one settlement.

Nukissiorfiit supplies district and electric heating in nine towns in Greenland, and interruptible district heating to individual customers in another five towns and one settlement.

A total of 347.8 GWh of heat was sold in 2022, with district heating accounting for 65% and electric heating 35%. 7% more heat was sold than in 2021. More customers, but also the cold winter, resulted in this development.

The prices were fixed in the year 2022, and were last changed on 1 September 2021, when the interruptible district and electric heating price was reduced by 28%, and the fixed price by 4% due to oil price reduction. This was a consequence of private oil boilers becoming more efficient, and the public supply of interruptible heat slowly becoming less competitive.

District heating is supplied in general, and also electric heating in the hydroelectric villages. District heating is sold both at a tariff where Nukissiorfiit ensures full supply, and at a cheaper tariff where the customer has the back-up obligation in the event of a breakdown.

Electric heating is currently and in the future only sold in an interruptible form where the customer has the back-up obligation. Until 2010, customers in Nuuk were also able to choose

fixed electric heating, which means that Nukissiorfiit ensures supply regardless of any supply failure from the hydropower plant, which is the primary supply plant for Nuuk. This is because the city's development has meant that the Buksefjord hydroelectric power plant approaches maximum capacity during the winter period. The ratio between sales of fixed and interruptible electric heating in Nuuk is approximately 2 to 1, and will naturally decrease in the years to come as new customers are only connected to interruptible heating.

In 2022, heat revenue accounted for approximately 33% of Nukissiorfiit's primary revenue.

### Conversion to electric heating

In 2022, there was – and still is – a strong focus on increasing the speed of conversion from oil-based heating to electricity-based heating for consumers in the hydroelectric cities. The Buksefjord hydroelectric power plant needs to be expanded, as the current capacity does not cover Nuuk's future electricity needs. Part of the financing of the expansion will come from converting oil-based heating to electric heating. The expansion of the Buksefjord power plant is expected to be completed in 2028.

Efforts are therefore being made to create action plans, uniform case management and technical standards for electricity-based heating installations, so that the roll-out of interruptible electricity can start as soon as possible in the hydroelectric cities of Ilulissat and Nuuk, as well as the upcoming hydroelectric cities of Aasiaat and Qasigiannguit. Oil imports are thereby

converted into our own energy, which benefits both the climate and the economy.

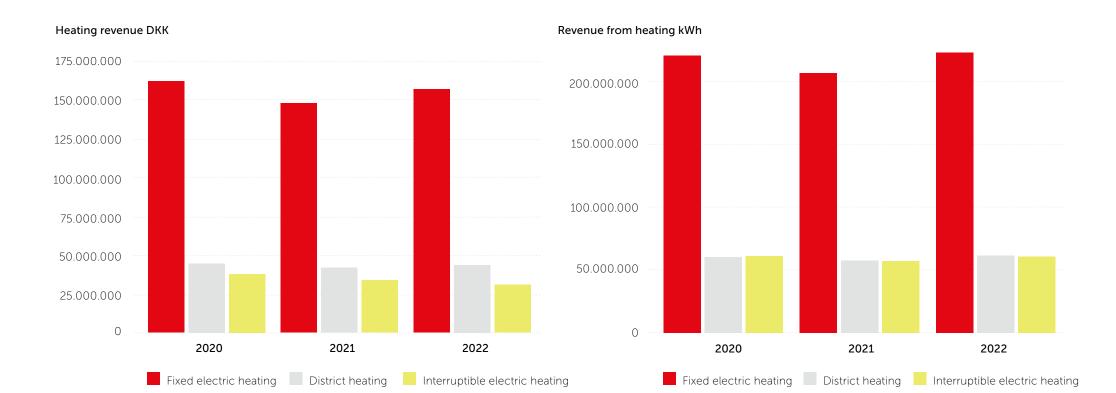
New buildings are assigned a form of heating through local plans for either district heating or electric heating, which ensures a large part of the green transition in hydroelectric cities.

#### Control solutions for electric heating

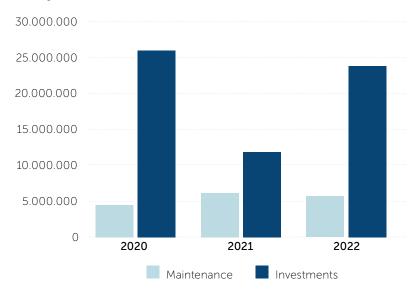
The supply in Greenland is island-based, which means that there is generally no coherent supply network connecting towns and settlements with each other. For this reason, the electricity grids in some towns and settlements, for example, are independent networks. To maintain a high level of security of supply, back-up supply systems in every town and settlement are essential.

In cities with electric heating, therefore, it is important that electric heating can be interrupted, so that the back-up systems do not also have to supply consumers with electric heat in the event of a breakdown. This minimises capital expenditure for diesel backup, and displaces fossil fuels.

The need to be able to interrupt the electricity supply to interruptible electric heating systems is increasing as interruptible electric heating is rolled out in hydroelectric cities. Pilot trials have therefore been initiated, to test whether the existing heat meter can be used to switch the electric heating on and off. Heat meters for interruptible electric heating can be switched off via wireless communication over the 4G mobile network.







## Cooling

In the district heating network, the focus in the coming years will be on optimising operations specifically by improving cooling. Cooling is the difference between the delivered flow temperature and the returned contraflow temperature. The higher this difference, the more heat can be supplied with the existing pipes and pumps, and thus there are savings to be made in reduced heat loss, pump operation, heating installations and pipe dimensions. Improved cooling requires good collaboration between the building owner, HVAC installers and Nukissiorfiit.

## Heating pump technology

There is generally a lot of interest in heating pumps. Nukissiorfiit has therefore started mapping out which types of heating pumps are suitable for heat production in urban areas. The challenge is typically low efficiency in winter, when heat is needed most, and the relatively high investment cost can be compared to an electric boiler, which has relatively low investment and maintenance costs.

However, the heating pump may have a good case in towns with limited hydropower and a milder climate, such as Qaqortoq, where Nukissiorfiit is also actively working to enter into a partnership on efficient heat production using heating pumps. This includes customers' own decentralised pumps as well as central heating pumps for supply to the district heating network.

In 2022, maintenance work on the district heating system amounted to DKK 5.7 million, and investments of DKK 23.9 million were made.





# MANAGEMENT - DIGITISATION

Nukissiorfiit would like the company's processes for the operation and maintenance of the facilities to be digitised as much as possible. Moreover, Nukissiorfiit will ensure that decisions regarding operation and maintenance as well as plant replacement are data-driven.

#### Sertica

To achieve the above objectives, Nukissiorfiit has, among other things, acquired the Sertica maintenance system. Sertica was acquired in 2020 and pilot tested in 2021. Following an ERP analysis in the autumn of 2022, it has been reconfirmed that Sertica will be used as Nukissiorfiit's maintenance system in the future. Thus, implementation is finally underway.

Sertica is thus an essential part of ensuring an overview of the maintenance standard and related tasks for all of the facilities, which currently amounts to approximately DKK 2.8 billion. By using Sertica, Nukissiorfiit ensures that the maintenance tasks at the facilities are carried out in accordance with established plans. In addition, it also creates an overview of which maintenance tasks have not been carried out, which maintenance tasks have not been carried out, and which maintenance tasks will be carried in the future for the individual plants.

The individual maintenance tasks will also be linked to finances, to enable Nukissiorfiit to monitor the cost of the maintenance tasks for the individual plant. This also provides an indication as to whether a plant is ready for replacement, or whether there is still a rationale for maintaining the system. This ensures better planning of resources and work.

#### **Asset Management**

Based on an increasing investment need and a limited financial framework, Nukissiorfiit needs to develop an asset management policy for the total facility portfolio. This will form the overall framework for the prioritisation and decision-making model that Nukissiorfiit will be using in the future. The initial work was completed in 2022, including interviews with relevant employees and a workshop in Nuuk.

In 2023, the governance structure and responsibilities for fixed assets will be defined. We will ensure that our Sertica maintenance programme is embedded across the organisation, to allow for the most efficient use of the system for data collection and documentation purposes. Multi-year investment plans will be drawn up for construction and maintenance projects. In addition, training materials and onboarding programmes will also be developed for new employees.

## Data management

In 2022 Nukissiorfiit started a project to centrally collect data from our plants.

Nukissiorfiit currently has five hydropower plants, 88 electric power plants, 23 thermal power plants and 69 waterworks. In addition, it has 15 solar installations and three wind turbines. More power plants will be built in the coming years.

Apart from energy production, these facilities produce a lot of data that comes from sensors and PLCs (programmable logic controllers). These are small computers specially designed to automate and control a process. PLCs control machines and

the production process, and activities that require a high degree of reliability and fault diagnosis.

Having easy access to this data will give Nukissiorfiit a great advantage. It provides decision-makers and maintenance and technical teams with a valuable tool to monitor consumption, production and relevant trends for the future.

This large volume of data is called "bigdata", and is produced by thousands of components connected to PLCs located in CRM systems.

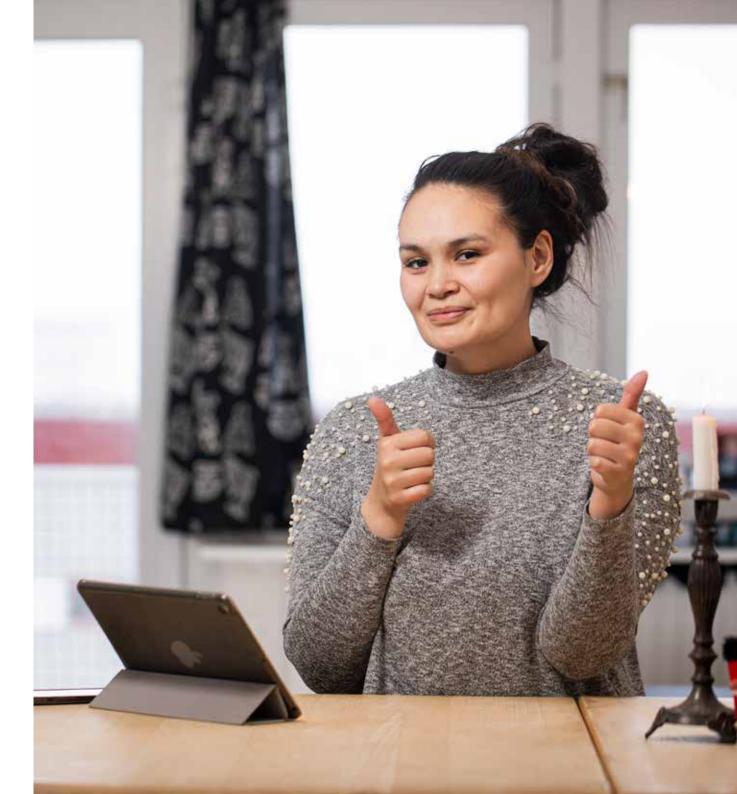
Nowadays, when data, the Internet and artificial intelligence can be highly advantageous to the organisation for improving performance, maintenance, monitoring and visualisations, as well as decision-making, it would be very beneficial for us to extract, standardise and categorise data in the form of a data centre for further use

Nukissiorfiit handles some of the data manually, and lacks an integrated network and data centre that would connect these facilities across the country through a reliable network in order to standardise and categorise the data produced.

## **Customer portal**

To improve customer service and support the digitisation strategy, a new customer portal was launched in December 2022. The new customer portal allows customers to complete simple processes, such as registering and de-registering a move, checking bills, paying bills, and checking their consumption.

In this way, Nukissiorfiit expects to reduce waiting time and free up staff resources to take care of more complicated customer cases while reducing the case processing time.



## RISK MANAGEMENT

### Security of supply

For society to function, it is essential that Nukissiorfiit ensures a high level of security of supply. Nukissiorfiit is therefore continuously working to ensure a high level of security of supply, and to improve the existing infrastructure. This is achieved through increased monitoring, improved management, modernisation, redundancy in the distribution network, and the stockpiling of critical components. Nukissiorfiit has back-up facilities and reserve capacity in all towns and settlements, which are used if the regular supply fails. In addition, Nukissiorfiit has mobile emergency facilities, which can be sailed or flown to a given town or settlement experiencing a supply failure. Nukissiorfiit is continuously preparing and updating its contingency plans for various emergencies that may arise, to ensure the supply of electricity, water and heat.

## Competencies

For Nukissiorfiit, it is crucial to have a stable workforce to ensure supply now and in the future. Nukissiorfiit faces the challenge of retaining and attracting a well-educated labour force on public sector wages. Nukissiorfiit is therefore working hard to ensure good working conditions for employees, and to attract and retain competent employees. This means

that there is a strong focus on work-life balance, flexible working hours, senior staff schemes, and exercise during working hours. Further initiatives are presented in the section "Nukissiorfiit from the inside".

#### Interest rate risk

Nukissiorfiit has all its loan agreements with the Naalakkersuisut. There is therefore no risk of the impact of market interest rates on Nukissiorfiit's loans at present. Long-term loans from before 2016 pay 6% interest to the National Treasury, while new loans pay 3% interest. Loans with a 6% interest rate will gradually be lowered to 3%. This is done with an annual interest rate reduction of 0.22%. Interest expenses are therefore expected to decrease over time, and there are currently no loans bearing interest of 6%.

## IT security and cybercrime

security is therefore a vital area of focus. Cyber attacks on IT systems and loss of data can have major consequences for power supply and consumers, and could affect trust in Nukissiorfiit. We are constantly aware of developments, and are strengthening security in accordance with recognised standards and systems that support the need for secure IT operations.

It is the management's assessment that Nukissiorfiit meets the requirement to address risks related to cybercrime and data security. This is an area that still needs and will continue to receive management focus.

### **PRICES**

#### Oil price and currency

Nukissiorfiit's purchase of diesel oil is settled in DKK, and fluctuations in the oil price mean that Nukissiorfiit's costs vary with the oil price. Moreover, there is a natural correlation with Nukissiorfiit's pricing. However, the latter is politically determined, and for this reason, there may sometimes be a delay and individual cases of deviations from this principle.

## Sales prices

Nukissiorfiit's prices and terms of sale and delivery are approved by the Naalakkersuisut on the basis of a proposal from Nukissiorfiit. Prices therefore reflect political choices to some extent, and not the directly underlying production costs. Based on the targets of the Naalakkersiusut, the members of the Cabinet decided to introduce nationwide unit prices for electricity, water and heating from 1 Janu-

ary 2018. This means that all customers pay the same prices for Nukissiorfiit's products. However, the land-based fishing industry pays up to 50% of the local unit costs, but up to a maximum of DKK 1.65 per kWh electricity and DKK 20.00 per m3 water, which are the normal prices for these products, and a minimum of 50% of consumer prices. This means that in the large cities prices can be lower, while in settlements and smaller towns, there is no difference in pricing for private individuals and the fishing industry. However, the pricing of Nukissiorfiit's products is lower than the production costs in most towns and settlements. Thus, the average weighted production price for one kWh of electricity in 2022 was DKK 1.92, but it was sold for DKK 1.65 per kWh to the consumer, while the weighted average cost of one m3 of water was DKK 27.05, with a consumer price of DKK 20 per m3. Production costs are generally higher in the smaller towns and settlements that are supplied with diesel, while the lowest production costs are found in the hydroelectric towns. A complete overview of Nukissiorfiit's production costs at each location can be found in the distribution statement in Appendix 1.

In 2022, the Naalakkersuisut approved Nukissiorfiit's 2023 increase of the electricity and water tariffs, which have been unchanged since 2019. This is a rate increase of 10 øre per kilowatt hour (kWh) for electricity for light and

power, and one krone and twenty øre per cubic metre of water. The new electricity and water tariffs came into effect on 1 February 2023.

## **Suppliers**

Due to Nukissiorfiit's organisational size, it is not always possible for Nukissiorfiit to enter into the same volume agreements as other larger foreign companies. In practice, this means that Nukissiorfiit cannot always achieve the same favourable delivery and pricing terms. Similarly, the supplier offering in several communities is limited, which can, for example, make Nukissiorfiit's construction work more expensive. Nukissiorfiit is generally working to fill more with fewer qualified suppliers, and to support the development of a competent and competitive local supplier base. Long delivery times make it necessary to stock critical components, and several locations in the country are only served for limited periods of time. This places particularly high demands on planning, managing and monitoring the flow of goods for both spare parts and construction projects.









Nukissiorfiit supplies the Greenlandic public with electricity, heat and water. Our mission is to run a socially responsible and sustainable business that respects the environment while promoting and contributing to the development of Greenlandic society and public health. This means that Nukissiorfiit sticks to the earlier definition of sustainability, namely that a country's society, economy and environment are connected and interdependent.

In 2022, Nukissiorfiit maintained its focus on the following four UN Sustainable Development Goals:









## SDG 6 Clean water and sanitation

Every citizen of Greenland is dependent on water and energy from Nukissiorfiit every day. That's why we're also working hard to improve the quality of drinking water.

## **Documented Drinking Water Safety (DDS)**

Drinking water quality is ensured by Nukissiorfiit's compliance with the standards of Documented Drinking Water Safety

(DDS). This means that the water is treated as food. Nukissiorfiit has instructed on and introduced DDS in all locations, but there are a few settlements that it has not been physically possible to visit and hence make risk assessments. Here, the operating staff have been instructed, so that it can be started. With Nukissiorfiit's takeover from Mittarfeqarfiit, risk assessment will begin in 2023, while staff will be trained in DDS.

### Boil ban days

For several years, Nukissiorfiit has registered the number of boil ban days in Greenland per year. In 2022, there were 727 boil ban days, which is an improvement of about 17% from 2021. Nukissiorfiit has a backlog of renovation work on water pipes, etc., which is of significance for this. It is not clear, however, how many people will be affected by this, as a boil ban day takes no account of whether it concerns a city with 3,000 inhabitants or a small settlement with 50 inhabitants.

## Water transportation

In 2022, Nukissiorfiit had approximately 110,000 refills via water transportation.

As part of its efforts to improve drinking water quality and ensure clean drinking water for all consumers, Nukissiorfiit is continuously working on solutions to streamline and optimise water transport. Over a number of years, Nukissiorfiit expects to reduce the amount of water delivered to customers in order to improve water quality for consumers.

## SDG 7 Sustainable energy

In 2022, Nukissiorfiit supplied Greenlandic towns and settlements with 74% renewable energy.

In addition to the expansion of the Buksefjord hydropower plant at Nuuk and the establishment of a hydropower plant at Qasigiannguit/Aasiaat, Nukissiorfiit wants to strengthen the green transition. To succeed in this ambition, Nukissiorfiit is also exploring the possibilities for building small-scale renewable power plants.

Small-scale renewable energy is intended to supplement diesel power plants in settlements and small towns where it is not economically rational to replace diesel power plants with 100% renewable energy plants. Although small-scale renewables do not fully replace diesel power plants, they do reduce the consumption of diesel fuel, thereby reducing  $\mathrm{CO}_2$  emissions. The challenge with small-scale renewable energy installations is that they remain more costly than conventional energy production.

Investigations are ongoing in the following or of priority: What is physically possible at the current location; what is cheapest per kWp produced; and what is cheapest per saved  $\mathrm{CO}_2$  emissions.

These priority investigations are also ongoing across the organisation, to optimise the use of resources and reduce  $\mathrm{CO}_2$  as much as possible per investment, to create the most suitable sustainable solutions in settlements and small towns.





Nukissiorfiit's hydropower works spared the environment 186,000 tonnes of  ${\rm CO_2}$  in 2022. This is equivalent to 2,000 trips across the Atlantic on the new Tuukkaq

To find the best solutions for small-scale renewable energy installations, Nukissiorfiit has been testing different types of renewable energy in a number off settlements for several years.

Micro-hydropower

In 2020, feasibility studies were conducted for the establishment of micro-hydropower in Kulusuk and Narsarmijit, with subsequent reporting in 2021. In Kulusuk, additional geological surveys were carried out in 2022 to find out if it is possible to drill a water supply for a future micro-hydro power plant. If this is feasible, a hydroelectric power plant is expected to supply Kulusuk and Kulusuk Airport with approximately 90% green energy.

In Narsarmijit, measurements of the river's water flow continued in 2022. The measurements are positive, and show that even in the winter months there will be enough water flow in the river to supply Narsarmijit with 100% green energy, thereby displacing approximately 100,000 liters of oil.

Over the summer of 2022, feasibility studies were conducted together with a team of American hydropower specialists, for the possible establishment of micro-hydropower in Kangerlussuaq. Final reporting is pending at this time, but the preliminary results look positive.

#### Photovoltaic installations

Nukissiorfiit currently has 15 solar PV plants with a total installed capacity of 620 kW. In 2022, solar PV plants have been installed in Qagortoq and Alluitsup Paa. Each of the PV systems are 15

kW. The price per kWp varies depending on the location, whereby rooftop is the cheapest, and ground installation with ballast and ground levelling the most expensive, with prices ranging from DKK 12-22 thousand per kWp.

#### Wind energy

Over the summer of 2022, feasibility studies were conducted together with a team of American wind specialists, for the possible establishment of wind energy in Aasiaat, Qeqertarsuaq, Sisimiut and Sarfannquit. Final reporting is pending.

In 2022, the two test wind turbines in Sisimiut were fitted with reinforced parts, and are both up and running. The performance of the wind turbines will be closely monitored over the winter of 2022-2023.

In 2022, there were investments in two smaller wind turbines, one 6 kW and one 15 kW. Wind turbines have been operating in Antarctica for more than 30 years, and two wind turbines have been operating in Greenland for two years. The 6 kW wind turbine is installed in Eqalugaarsuit, and the 15 kW wind turbine is under construction in Ammassivik.

Wind energy in Greenland can be challenged by the highly changeable weather. The southern third of Greenland's west coast has the greatest wind potential. Another challenge is that the vast majority of wind turbines are designed for use in warmer areas with constant average winds. This means that the physical durability of wind turbines is affected by the Arctic conditions.

The lack of infrastructure in Greenland means that in many places it is difficult and will require a high willingness to invest, as it is difficult to transport the parts for larger wind turbines. In addition, there is a lack of lifting equipment, trucks, etc. needed for the installation of larger wind turbines.

## **Battery storage (BESS)**

The use of battery banks is a very good, but expensive, technical solution to store excess electricity generation. Not only from renewable energy plants, but also from diesel-based power generation, as this saves many operating hours on diesel-based generators. In 2022, a 64 kWh battery bank was purchased for the solar power plant in Kangerluk. The battery bank is expected to be installed in spring 2023.

## SDG 13 Climate action

Most of the renewable energy supplied by Nukissiorfiit in Greenland comes from hydropower. Owing to the country's limited interconnected grid infrastructure, there are large differences in  $CO_2$  emissions per town/settlement. Hydroelectric towns have much lower  $CO_2$  emissions per kWh than towns with diesel-powered generators. The table in Appendix 2 on Page 54 illustrates that hydropower is by far the best solution for reducing  $CO_2$  emissions in the country.

## SDG 17 Partnerships

As Greenland's only water and energy supplier, Nukissiorfiit has an obligation to lead the green transition. The foundation for the country's other companies to convert their production so that it is more sustainable and emits less  $\mathrm{CO}_2$  requires Nukissiorfiit to provide stable renewable energy. For this reason, we work with different partnerships.

A study entitled "Clean Energy Technology Applications for Small Settlements" was conducted over the summer of 2022, to investigate the possibilities of using fuel cells in Ammassivik, Eqalugaarsuit, Qeqertarsuatsiaat, Sarfannguit, Ikerasaarsuk, Qeqertaq and Uummannaq. The final report is expected at the end of February 2023. The study was conducted and funded in partnership with the US Department of State.

In addition, Nukissiorfiit is involved in a project in Qaanaaq entitled: "Modeling a sustainable energy transition in northern Greenland: Qaanaaq case study". This project is funded with DKK 17.6 million over four years by the National Science Foundation.

In 2022, Greenland also participated in ARENA: Arctic Remote Energy Networks Academy. After expert selection from the University of Alaska, Fairbanks and the Alaska Center for Energy and Power, Nukissiorfiit was proud to send Technical Special Consultant Niels Erik Hagelqvist as the only representative from Greenland to this exciting course, for which a total of 16 participants were selected.

The ARENA programme is designed specifically for people living and working in remote circumpolar Arctic communities. By combining visits to Arctic communities, knowledge exchange between participants, presentations and laboratory and workshop demonstrations, the ARENA programme creates a network between both current and new energy professionals. The active learning process is achieved through hands-on learning experiences, presentations, lectures, mentors and leading project developers from across the circumpolar North.

In addition, ARENA 2022 participants have visited, through three on-site sessions, energy plants in Canada, Alaska and Iceland. The visits to the energy plants had a special focus on renewable energy and hybrid plants, where different renewable energy sources were combined in interaction with traditional forms of energy.





# NUKISSIORFIIT FROM THE INSIDE

#### Organisational development

In 2022, employee development was a focus in Nukissiorfiit, where a new staff development interview concept, Umimmak, was pilot tested in two departments at the head office, and is expected to be rolled out to the entire organisation in spring 2023.

In addition, the organisation has focused on upskilling middle managers, and in the autumn of 2022, two modules of Nukissiorfiit's internal team leader training course were held on the subjects "Personnel management" and "Daily effective management". The third module is scheduled for completion in the autumn of 2023 on the subject "Strategic Management".

In 2022, there was an increased strategic focus on recruitment, especially in order to accommodate an impending generational shift in operations.

In this connection, Nukissiorfiit has been actively present at Greenlandic and Danish educational institutions and trade fairs, and Nukissiorfiit has also focused on collaboration with the engineering school in Sisimiut, as well as with KTI, Skive College and Nordic Folkecenter on the establishment of an expanded version of the electricity supply engineer training course, which is supplemented with a module on renewable energy. The programme was planned in 2022, and the first group of trainees is expected to start in spring 2024.

In 2022, Nukissiorfiit identified the need for upskilling in operations, and has therefore registered two teams for the first module of the electricity supply engineer training course, to be completed in 2023, and with a view to completing module 2 on renewable energy in 2024.

## Our work to ensure a good workplace

Nukissiorfiit's focus is to create the best framework for employees, and Nukissiorfiit's HR department works continuously to increase employee satisfaction.

Therefore, Nukissiorfiit has been conducting annual employee satisfaction surveys (ESS) for a number of years, to be able to target efforts in the area.

### Gender equality in Nukissiorfiit

Women and men are treated equally in both internal and external recruitment, and there is equality in salary setting and subsequent staff development at Nukissiorfiit.

Nukissiorfiit recommends that everyone, regardless of gender, age, ethnicity, etc., applies for suitable vacancies. Nukissiorfiit would like a staff composition that reflects the surrounding society and at the same time promotes diversity.

#### Sickness absence efforts in Nukissiorfiit

In 2021, Nukissiorfiit had a particular focus on and success in reducing sickness absence.

In 2022, the organisation continued to work in this area, and a process has been set up, whereby each HR manager receives a monthly report on sickness absence in their department. The report highlights employees with sickness absence above the set limit of 6%, and the manager follows up with well-being interviews. The purpose of the process is to ensure an early dialogue

about the employee's well-being, and thus create the best conditions for retaining employees in the organisation.

#### **Employee satisfaction survey (ESS) 2022**

In 2021, Nukissiorfiit experienced a lower response rate to the ESS and, against this background, HR had a special role in 2022 in terms of preparing managers to engage employees in the ESS and to analyse and draw conclusions based on the results of the 2022 ESS, in order to make specific action plans that could help to increase employee satisfaction in the organisation, and thus also raise the response rate again. Although the decline in job satisfaction and loyalty is limited, it is naturally of concern to the management of Nukissiorfiit.

Additional focus is therefore placed on the work with the action plans for 2023, whereby the organisation's leaders must ensure that employees influence and get involved in the mapping out of specific efforts and actions.

The employee satisfaction survey (ESS) in 2022 showed that Nukissiorfiit scored high on job content, collaboration and loyalty, and the organisation will continue to focus on these areas going forward, knowing that job content is crucial for employee retention.

The focus on internal communication is expected to intensify and, hopefully, improve through a number of initiatives in 2023, including an increased focus on management communication.



# MAIN AND KEY FIGURES

DKK million	2022	2021	2020	2019	2018
RESULT					
Net turnover	806,4	787,7	817,8	749,4	781,9
Cost of sales	-165,0	-184,9	-196,7	-178,8	-196,2
Operating expenses	-368,8	-373,0	-361,0	-371,3	-368,8
Depreciation	-172,8	-292,6	-334,4	-123,0	-127,0
Interest	-70,7	-75,6	-78,6	-81,3	-85,4
Profit/loss for the year	29,1	-138,3	-152,9	-5,0	4,6
BALANCE SHEET					
Intangible fixed assets	3,6	5,4		0,5	1,5
Tangible fixed assets	2.837,0	2.845,0	3.007,0	2.841,4	2.773,3
Current assets	361,8	316,5	293,0	226,5	246,6
Equity	1.493,4	1.464,2	1.602,5	1.371,2	1.376,2
Long-term debt	1.537,0	1.547,0	1.557,7	1.527,3	1.480,0
Balance sheet total	3.202,4	3.166,9	3.300,0	3.068,4	3.021,3
CASH FLOWS					
Operating activities	184,6	192,8	147,8	111,8	165,1
Investment activities	-163	-136,0	-115,3	-190,1	-190,2
Financing activities	15,8	-103,9	24,5	83,2	18,7
Change in liquidity	37,4	-47,0	57,0	4,9	-6,5

DKK million	2022	2021	2020	2019	2018
KEYFIGURES					
EBITDA	272,6	229,9	260,2	199,3	217,0
Profit/loss for the year	29,1	-138,3	-152,9	-5,0	4,6
Rate of return	3,1%	-1,9%	-2,3%	2,5%	2,4%
Solidity	46,6%	46,2%	48,6%	44,7%	45,5%
Nukissiorfiit's net liquidity impact in the National Treasury	-13,8	114,4	-25,2	-74,1	-10,4
STATISTICS					
Sale of electricity to general consumers (GWh)*	218	210	207	196	199
Sale of electricity to fishing industry (GWh)	35	35	34	39	39
Sale of water to general consumers (mil. m³)	2,9	2,6	2,6	2,5	2,5
Sale of water to fishing industry (mil. m³)	2,2	2,4	2,6	2,4	2,3
Sale of electricity and district heating (GWh)*	350	332	342	315	342
Number of employees (employed full-time)	393	416	437	405	395
* Incl. internal consumption					

# MANAGEMENT ENDORSEMENT

We have today reviewed and approved the annual report for the financial year 1 January 2022 to 31 December 2022 for Nukissiorfiit.

The annual report is presented in accordance with the Government of Greenland's Executive Order No. 24 of 22 December 2017 on financial reporting for the Government of Greenland's net-controlled companies.

The Executive Order stipulates that the annual report must be presented in accordance with the Ordinance on the Annual Accounts Act in Greenland in force at any given time, with the deviations that follow from the fact that it is a self-governed enterprise operated on the basis of social considerations regulated by special legislation.

We hereby declare:

- That the annual report is true and fair, i.e. that the annual report does not contain material omissions or misstatements.
- That the transactions covered by the financial reporting comply with legislation and other regulations, as well as agreements entered into and customary practice.
- That business procedures have been established to ensure financially appropriate management of the funds covered by the annual report.

The annual report is recommended for approval by Inatsisartut.

Nuuk, 31 march 2023

Nukissiorfiit

Cicilie Senderovitz

CEO, Energy Director

Ministry of Agriculture,
Self-sufficiency, Energy and
the Environment

Natuk Lund Olsen Head of Ministry

Wall Il

# INDEPENDENT AUDITOR'S REPORT

#### **TO INATSISARTUT**

We have audited the financial statements of Nukissiorfiit for the financial year 01.01.2022-31.12.2022, which comprise income statement, balance sheet, cash flow statement, notes, and accounting policies on Pages 33-48. The financial statements have been prepared in accordance with the Government of Greenland's Executive Order No. 24 of 22 December 2017 on financial reporting for the Government of Greenland's net-managed companies (hereinafter the Executive Order). The Executive Order stipulates that the annual report must be presented in accordance with the Ordinance on the Annual Accounts Act in Greenland in force at any given time, with the deviations that follow from the fact that it is a self-governed enterprise operated on the basis of social considerations regulated by special legislation.

In our opinion, the financial statements give a true and fair view of the company's assets, liabilities and financial position as at 31 December 2022, and of the results of the company's operations for the financial year 01.01.2022-31.12.2022 in accordance with the Government of Greenland's Executive Order No. 24 of 22 December 2017 on financial reporting for the net-managed enterprises of the Government of Greenland, with the deviations that follow from the fact that it is a self-governed enterprise operated for social purposes, regulated by special legislation.

#### Basis for conclusion

We have conducted our audit in compliance with International Standards on Auditing and additional requirements applicable in Greenland, and the standards for public auditing, as the audit is conducted in accordance with the Executive Order. Our responsibilities under these standards and requirements are further described in the section of the auditor's report entitled "Auditor's responsibilities for the audit of the financial statements". We are independent of the company in compliance with the international guidelines for auditors' ethical conduct of the International Ethics Standards Board for Accountants (IESBA Code) and the additional ethical requirements applicable in Greenland, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

## Highlighting matters related to the audit

Nukissiorfitt has included Appendices 1-2 to the financial statements. These documents are not included in the audit of the financial statements.

## Management's responsibility for the financial statements

The management is responsible for the preparation and fair presentation of financial statements in accordance with the Executive Order. The management is also responsible for the in-

ternal control the management considers necessary to enable the preparation of financial statements that are free from material misstatement, whether this is due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the company's ability to continue its operations, disclosing matters related to continued operations where relevant, and using continued operations as the basis of accounting, unless the management intends to liquidate the company or cease operations, or has no other realistic alternative than to do so.

## Auditor's responsibility for the audit of the financial statements

Our objectives are to obtain reasonable assurance that the financial statements as a whole are free from material misstatement, whether this is due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing and additional requirements applicable in Greenland and Government Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error, and are material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions made by users on the basis of the financial statements.

As part of an audit conducted in accordance with International Standards on Auditing and the additional requirements applicable in Greenland and the Standards on Public Auditing, we ex-

ercise professional judgment and maintain professional skepticism throughout the audit. In addition:

- We identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to these risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement due to fraud is higher than for a material misstatement due to error, as fraud can include conspiracies, forgery, deliberate omissions, misrepresentations or the overriding of internal controls.
- We obtain an understanding of the internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- We evaluate the appropriateness of the accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- We draw conclusions on the appropriateness of the management's use of continued operations as a basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists in relation to events or conditions that may cast significant doubt on the company's ability to continue its operations. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial

statements or, if such disclosures are inadequate, to modify our conclusion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue its operations.

We evaluate the overall presentation, structure and content
of the financial statements, including the disclosures, and
whether the financial statements represent the underlying
transactions and events in a manner that achieves fair
presentation.

We communicate with the senior management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

## Opinion on the management report

The management is responsible for the management report.

Our conclusion on the financial statements does not cover the management's report, and we do not express any form of assurance conclusion on the management's report.

Our responsibility in connection with our audit of the financial statements is to read the management's report and, in doing so, consider whether the report is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

It is also our responsibility is to consider whether the management report contains the information required by the Danish Annual Accounts Act.

Based on the work we have carried out, in our opinion, the management report is in accordance with the financial statements and has been prepared in compliance with the requirements of the Danish Annual Accounts Act. We have not identified any material misstatements in the management report.

## DECLARATION ACCORDING TO OTHER LEGISLATION AND REGULATIONS

## Opinion on compliance and performance auditing

The management is responsible for ensuring that the transactions covered by the financial reporting are in accordance with appropriations granted, legislation and other regulations, as well as agreements entered into and customary practice. The management is also responsible for ensuring that due financial consideration has been given to the management of the funds included in the financial statements. The management is responsible for establishing systems and processes that support economy, productivity and efficiency.

Our responsibility in connection with our audit of the financial statements is to conduct compliance and performance audits of selected matters in accordance with public auditing standards. In our compliance audit, we obtain reasonable assurance about whether the transactions covered by the financial reporting are in accordance with the relevant provisions of appropriations, laws and other regulations, as well as agreements entered into and usual practice. In our performance audit, we assess with reasonable assurance whether the systems, processes or transactions examined support due financial consideration in the management of the funds and operations of the areas covered by the financial statements.

If, based on the work we have performed, we conclude that there is cause to make significant critical observations, we report these in this opinion.

We have no significant critical observations to report in this regard.

Nuuk, 31 march 2023

Deloitte

Bo Colbe
Chartered Accountant
MNE-nr. 24634

Per Timmermann
Chartered Accountant
MNE-nr. 18652



## FINANCIAL STATEMENTS

In 2022, Nukissiorfiit achieved a result of DKK 29.1 million, compared with DKK -138.3 million in 2021. Earnings before interest and depreciation (the Earnings Contribution) was DKK 272.6 million, which is DKK 42.7 million higher than in 2021. Primary revenue was DKK 701.2 million, which is DKK 21 million higher than in 2021.

The heating tariffs were reduced as of 1 September 2021, and this had a negative revenue effect in 2022 compared with DKK 11.4 million for the first eight months of 2021.

Positive sales deviations on electricity, water and heating have thus produced DKK 32.4 million in additional revenue compared with the previous year. 2021 was a relatively warm year, with heating sales being reduced compared with previous years. On the other hand, 2022 was relatively cold, which resulted in higher sales for heating purposes. The additional sales produced approximately DKK 19.5 million in additional revenue.

Electricity for light and power sales also increased in 2022. The increase was just over 3%, with a revenue effect of approximately DKK 7.6 million. The increase is only for ordinary consumers.

Sales of water increased, with a revenue effect of DKK 5.3 million. The main reason for this is the change in sales to the fishing industry.

Internal rates increased in order to achieve savings of resources, and this resulted in an additional income of approximately DKK 0.2 million.

Secondary revenue decreased by DKK 2.3 million. The Service

Contract was increased by DKK 5.3 million, so there was an additional decrease of DKK 7.6 million. Reminder fees and other debtor fees in particular were the main causes of this, with a decrease of DKK 3.1 million. Fewer service line connections led to a further DKK 1.8 million in revenue decline and a DKK 1.4 million reduction in the sales of goods.

The cost of goods sold decreased by DKK 19.9 million in 2022 despite increasing sales. The oil price was reduced by DKK 0.80/litre at the beginning of October 2021, which meant that oil consumption in the first nine months of 2021 was DKK 18.7 million lower in 2022 for this reason.

The remaining lower consumption is mainly due to a reduced need for oil backup in Sisimiut and a breakdown of the transmission line to the Qorlortorsuag hydropower plant in 2021.

In Nuuk, there has been additional consumption primarily due to the review and repair of the transmission line to the Buksefjord plant.

In the Payroll and Staffing area, costs have decreased by DKK 1.7 million. Income from our own work on construction projects fell by DKK 2.3 million. As a result, payroll and staffing costs fell by DKK 4.0 million.

In 2022, Nukissiorfiit focused on streamlining the amount of remuneration. This partly explains the decrease in labour costs by DKK 6.8 million. It has also been caused by periods of vacant positions and functions that have not been refilled.

Personnel costs, on the other hand, increased by DKK 2.8 mil-

lion. Nukissiorfiit has had a greater need for interpretation tasks, focus on safety equipment and employee development in the form of upskilling of middle managers and general further training of staff.

On capacity costs, an amount of DKK 176.7 million was spent on consumption, corresponding to a slight decrease of DKK 2.5 million compared with 2021.

The operating projects' share of capacity costs was reduced from DKK 82.3 million in 2021 to DKK 77.9 million in 2022. Operating projects represent the repair and maintenance costs of fixed assets. There is a strong focus on planning and prioritising repair and maintenance tasks, in order to maintain security of supply.

In 2021, there were a large number tasks related to the maintenance of the distribution network, and consumption had actually doubled to DKK 21 million compared with the previous year, and the level for the area was reduced by DKK 3.1 million in 2022, but remains relatively high in efforts to ensure a maintenance standard that ensures security of supply.

The largest single item was the top inspection of the transmission line at the Qorlortorsuaq hydroelectric power plant costing DKK 2.6 million.

Fewer consultants were used for operational projects – actually in the region of DKK 3.5 million. The consultancy area has otherwise resulted in more costs, especially for debt collection cases and auditing. Losses on debtors decreased by DKK 0.7 million, while the IT area has increased by DKK 0.6 million, or approx.

4%. There are no major changes in administration, communication and insurance.

Depreciation and revaluation amounted to a net DKK 172.8 million in 2022. In 2021, the amount was DKK 292.6 million. Depreciation was DKK 134.7 million, hence DKK 1.2 million lower than in 2021. Net depreciation amounted to DKK 38.1 million compared with DKK 156.7 million in 2021, where the depreciation was for three years. Depreciations are made where plants are not profitable at current tariffs.

The interest expense was DKK 70.7 million, thus DKK 4.6 million lower than in 2021. The decrease is due to the repayment of DKK 70 million in older debt with higher interest rates than the DKK 60 million in loans raised during the year. At the same time, there is an ongoing interest rate reduction of 0.22% p.a. on the older debt originally taken out at a 6% interest rate. This is until the interest rate reaches the 3% level at which new loans are also taken out. Better current liquidity in 2022 also resulted in DKK 0.3 million lower bank interest.

The debtor pool was DKK 122.5 million, compared with DKK 123.6 million at the end of 2021.

Cash and cash equivalents were DKK 60.7 million, compared with DKK 23.4 million at the end of 2021. Thus the total balance sheet amounted to DKK 3.2 billion at the end of 2021.



# ACCOUNTING POLICIES ADOPTED

The financial statements have been submitted in accordance with the Government of Greenland's Executive Order No. 24 of 22 December 2017 on financial reporting for the Government of Greenland's net-controlled companies. The Executive Order requires Nukissiorfiit to prepare its financial statements in accordance with the Danish Annual Accounts Act, including, in particular, the provisions for accounting class C companies. This takes account of the fact that Nukissiorfiit is a public utility subject to political price regulation.

### Accounting class

Årsregnskabet er aflagt i overensstemmelse med årsregnskabsThe financial statements have been submitted in accordance with the provisions of the Danish Annual Accounts Act for accounting class C (large) with the adjustments that follow from the fact that the company is a net-controlled company operated on the basis of social considerations, and regulated by the Electrical Power Installations and Electrical Equipment Regulations No. 12 of 3 November 1994 and the Energy Supply Regulations No. 14 of 6 November 1997. For an explanation of deviations from the provisions of the Danish Annual Accounts Act, see Section 5 of the Government of Greenland's Executive Order No. 24 of 22 December 2017 on financial reporting for the Government of Greenland's net-managed companies. The company is not a company with share capital. Therefore, equity cannot be divided into share capital and retained earnings, which is why no statement of changes in equity has been prepared. The company is not liable for tax, so the information on this that would normally be contained in the financial statements is not included. The depreciation loss is calculated on a

location-by-location and product-by-product basis as the difference between a weighted sales price and a calculated cost price. There is no actual discounting of future cash flows with recognition of an internal rate of return. The company believes that the calculation method used provides the most accurate picture of the financial results for individual dwellings, taking the nature of the company and its management needs into account.

#### General recognition and measurement

Income is recognised in the income statement as it is earned. External costs are recognised in the financial year to which they relate. Assets are recognised in the balance sheet when the company is likely to gain future economic benefits and the value of the asset can be measured reliably. Liabilities are recognised in the balance sheet when the company is likely to gain future economic benefits and the value of the liability can be measured reliably. On initial recognition, assets and liabilities are measured at cost. Subsequently, assets and liabilities are measured as described for each line item. Recognition and measurement takes account of foreseeable losses and risks that arise before the annual report is submitted, and that confirm or refute conditions that exist on the balance sheet date. The carrying amount of intangible assets and property, plant and equipment is reviewed annually to determine whether there is any indication of significant impairment beyond that expressed by normal depreciation.

#### Net turnover

Net turnover primarily comprises revenue from the sale of electricity, water and heating invoiced to customers. The calculation

of Nukissiorfiit's primary net turnover, which consists of sales of electricity, water and heating, is primarily based on the remote reading of consumption meters. As the network connection to the meters can be unstable and readings cannot always be obtained from individual meters, the consumption on these meters is estimated on the basis of previous consumption. The correct reading will be included in the revenue when reconnection to the meters is established. This uncertainty is not assessed as having a material impact on the financial statements.

## Other operating income

Other operating income includes service contract payments, fees and other revenue.

#### Costs of raw materials and consumables

The cost of raw materials and consumables includes the cost of the raw materials and consumables used to achieve the net turnover for the year.

#### Other external costs

Other external costs comprise costs related to the company's primary activities, including direct costs related to the operation of facilities, premises costs, office expenses, promotional costs, etc. The item also includes depreciation of receivables recognised under receivables from the sale of goods and services.

### Staffing costs

Staffing costs include wages and salaries as well as costs for social security, pensions, etc. for the company's employees.

### Amortisations and depreciations

Amortisations and depreciations of tangible and intangible assets include amortisations and depreciations for the financial year and gains and losses on the sale of tangible and intangible assets. Financial items include interest income and interest expenses. Interest expenses primarily relate to payments made to the Government of Greenland, and are recognised at the time of accrual.

### Intangible fixed assets

Buildings, plant and machinery and other fixtures and fittings, tools and equipment are measured at cost less accumulated amortisations and depreciations. The cost price comprises the purchase price, costs directly attributable to the acquisition, and costs of preparing the asset for its intended use until the asset is ready for use. The main principle for capitalsation of assets is that assets are capitalised in the month in which they are put into use, after which depreciation commences. Own production is stated at cost price including IPO. Assets that have the character of an experimental project and are not profitable at the time of commissioning of the capital investment are expensed. For loose material and equipment, depreciation starts the month after acquisition. Buildings and machinery are depreciated according to their estimated useful lives. IT acquisitions

are generally expensed unless they are part of a larger overall IT project with an expected useful life of several years, in which case they are recognised as intangible assets. The calculation of depreciation is linear and based on the following assessment of the expected useful lives of the assets:

Buildings and facilities incl.	
distribution networks	5-80 years
Loose material and machinery	4-10 years
IT projects and ERP software	3-5 years

Assets with an acquisition value under DKK 50,000 per unit are expensed in full in the year of acquisition.

Expected useful lives and residual values are reassessed annually. Property, plant and equipment are written down to their recoverable amount if this is lower than the carrying amount.

## Depreciation testing

Depreciation testing is carried out on all of the company's buildings and facilities by location and product segment, to identify those facilities that may require an adjustment. The calculations include all of the company's costs and all of the company's revenue. Adjustments are only made for any structural changes and exceptional events that are not permanent. The calculation of adjustments is based on the Government of Greenland's Executive Order No. 22 of 22 December 2017 on the pricing of electricity, water and public heating, etc., Chapter 3-7 on the calculation of Nukissiorfiit's unit costs and distribution accounts.

The unit costs per plant and product segment is commensurate with the plant's ability to generate revenue based on the current weighted average tariffs. The weighted average tariffs are also adjusted for any structural changes, such as a change in service contract payment, which is recognised as a tariff increase. This produces a financial statement that is location-specific and segmented, showing where Nukissiorfiit has a profit or loss based on the current year's financial statements. The distribution statement is attached as an appendix. This ensures a focus on the company's fixed asset base in relation to the company's structural profitability and structural cost level. Depreciations on assets under construction are based on an ongoing assessment of whether the finished asset is likely to depreciate.

## Handling of depreciations

Deficits assessed as being permanent will give rise to a new depreciation of fixed assets at loss-making locations and even affect the result.

## Handling of reversal of depreciations

Surpluses that are identified in new depreciation tests will result in assets that have been adjusted after previous years' depreciation tests and now indicate a higher value than the book value, will have depreciations reversed until attainment of the carrying amount that the asset would have had if no depreciation were made

Depreciations of fixed asset investments are reversed throughout the income statement.

#### **Inventories**

Inventories are valued at cost based on the average cost principle plus freight costs, with the exception of stocks of gas oil. The latter inventories are valued at cost. Depreciation is made to the net realisation value if this is lower than the acquisition cost.

Gas oil and spare parts are included in the inventory value, see note to inventory

#### Receivables from sales

Receivables from sales are measured at face value less a provision for doubtful debts. The provision for doubtful debts is calculated on the basis of an individual assessment of each receivable.

#### Cash and cash equivalents

Cash and cash equivalents include cash and bank deposits.

## Fixed capital contribution

Fixed capital contribution is a historically calculated amount that is intended to signal a capital base.

## Adjustment of fixed asset values

This does not include realised value adjustments of the company's fixed assets. In 1998, the company switched from ex-

pense-based to cost-based accounting principles. For this reason, the value of the company's fixed assets was determined as the value of previous years' capital expenditure less calculated accumulated depreciation. Subsequently, other value adjustments have been made to the company's fixed assets with an offsetting item in this equity item. In 2018, a depreciation test was carried out in connection with the company's transition to measurement principles that largely correspond to the principles of the Danish Annual Accounts Act. As this was an adjustment in connection with a change in principle, the value adjustment was also posted to this equity item.

#### Other financial liabilities

Other financial liabilities are measured at amortised cost, which usually corresponds to the nominal value.

#### Cash flow statement

The indirect method is used to present the cash flow statement, which shows cash flows from operating, investing and financing activities, and the company's cash and cash equivalents at the beginning and end of the year. Cash flows from operating activities are calculated as operating profit adjusted for non-cash operating items, changes in working capital and operating appropriations from the Government of Greenland not recognised in the income statement. Cash flows from investing activities comprise payments related to the purchase and sale of intangible assets and property, plant and equipment. Cash flows from financing activities include borrowings, repayment of interest-bearing debt, and changes in the Government of Greenland's drawing

right. Cash and cash equivalents include the company's bank deposits and cash in hand.

#### **Key figures**

The key figures have been prepared in accordance with CFA Society Denmark's guidelines "Recommendations and Ratios". Refer to the overview of key figures and ratios for the formula for calculating the individual key figures.

Formulas for key figures:

Return on investment: Operating profit as a %

of the balance sheet total

Solidity: Equity as a % of the total assets

# INCOME STATEMENT

## **DKK 1,000**

		2022	2021
1	Net turnover	701.204	680.238
2	Other operating income	105.193	107.461
	Total turnover	806.397	787.699
	Cost of sales	(164.964)	(184.867)
	Other external costs	(176.698)	(179.191)
	Gross profit	464.735	423.641
3	Staffing costs	(192.104)	(193.759)
4	Amortisations and depreciations of assets	(172.789)	(292.569)
	Operating profit	99.842	(62.687)
5	Financial costs	(70.714)	(75.563)
	Profit/loss for the year	29.126	(138.250)
	Retained earnings	29.126	(138.250)

### BALANCE SHEET

**Assets** Liabilities

#### **DKK 1,000**

		2022	2021
6	Software	3.618	5.441
	Total intangible fixed assets	3.618	5.441
7	Buildings and facilities	2.727.633	2.764.773
8	Facilities under construction	92.791	64.645
9	Vehicles and equipment	16.605	15.586
	Total tangible fixed assets	2.837.029	2.845.004
	Total fixed assets	2.840.647	2.850.445
10	Stocks	87.490	75.310
	Total inventories	87.490	75.310
11	Accounts receivable from sales and services	122.452	123.631
	Receivables in the National Treasury	67.917	93.730
12	Other receivables	23.163	485
	Total receivables	213.532	217.846
	Cash and cash equivalents	60.747	23.351
	Total current assets	361.769	316.507
	Total assets	3.202.416	3.166.952

		2022	2021
	Equity		
	Fixed capital contribution	37.160	37.160
13	Adjustment of fixed asset values	1.314.768	1.314.768
14	Retained earnings	141.436	112.310
	Total equity	1.493.364	1.464.238
	Long-term debt		
15	Long-term debt	1.537.002	1.547.000
	Total long-term debt	1.537.002	1.547.000
	Short-term debt		
15	Current portion of long-term debt	70.670	70.670
	Other debt to the National Treasury	0	0
	Accrued holiday pay and salary	20.708	23.299
	Suppliers of goods and services	33.019	31.098
	Other debts	47.652	30.647
	Accruals and deferred income	0	0
	Total short-term debt	172.049	155.714
	Total liabilities	3.202.416	3.166.952

### CASH FLOW STATEMENT

		2022	2021
	Profit/loss for the year	29.126	(138.250)
	Amortisations and depreciations of fixed assets	172.789	292.569
	Change in working capital	(17.345)	38.455
	Liquidity impact of the operations	184.570	192.774
	Purchase of fixed assets	(163.549)	(136.051)
	Sale of fixed assets	562	43
	Liquidity impact of the investment	(162.987)	(136.008)
17	Long-term loans taken out	60.000	60.000
17	Repayments on long-term loans	(70.000)	(70.200)
17	Change in the drawing right	25.813	(93.673)
	Liquidity impact of the financing	15.813	(103.873)
	Total liquidity effect for the period	37.396	(47.107)
	Cash and cash equivalents 1 January	23.351	70.458
	Cash and cash equivalents 31 December	60.747	23.351
	Cash and cash equivalents include:		0
	Cash in hand Bank balance	0 60.747	0 23.351
	Total cash and cash equivalents	60.747	23.351

Note 1 Net turnover	2022	2021
Electricity sales	458.934	452.439
Water sales	84.510	79.248
Heating sales	157.463	148.329
Residual heating sales	297	222
Total net turnover	701.204	680.238
Note 2 Other operating income		
Meter rental	17.398	17.021
Fees and connection charges	11.774	16.805
Maintenance of street lighting, net	6.738	5.805
Service contract payment	60.922	58.178
Other income	8.361	9.652
Total other operating income	105.193	107.461

Note 3 Staffing costs	2022	2021
Nukissiorfiit has no obligations for ongoing pension payments.		
Staffing costs can be broken down as follows:		
Salaries and wages	180.960	187.429
Other staffing costs	17.916	15.416
Own production of construction tasks	(6.772)	(9.085)
Total staffing costs	192.104	193.759
Total salary for the Executive Board, including pension, etc.	1.338	1.193
In 2022, Nukissiorfiit employed monthly and hourly paid employees in an amoun	t of 393 full-time employees, compared with	416 in 2021.
Note 4 Amortisations and depreciations of assets		
Depreciations of intangible fixed assets	1.824	31
Depreciations of tangible fixed assets	133.389	135.255
Depreciations of intangible fixed assets	1.392	0
Depreciations of tangible fixed assets	36.746	157.328
Gain from decrease of fixed assets	(562)	(45)
	172.789	292.569

Note 5 Financial expenses	2022	2021
Interest on fixed assets	70.813	75.127
Interest income banks	(28)	0
Interest expense National treasury	0	0
Interest expense banks	87	402
Miscellaneous interest expenses	(158)	34
	70.714	75.563
Note 6 Intangible fixed assets		
Beginning of year	49.789	44.317
Increase for the year	0	5.472
Decrease for the year	0	0
Acquisition cost, end of year	49.789	49.789
Amortisations and depreciations		
Depreciation, beginning of year	(44.347)	(44.317)
Amortisations and depreciations for the year	(1.824)	(31)
Amortisations and depreciations, end of year	(46.171)	(44.348)
Book value as of 31 December	3.618	5.441

Note 7 Buildings and facilities	2022	2021
Acquisition cost		
Beginning of year	7.563.120	7.416.255
Increase for the year	127.888	147.541
Decrease for the year	(28.713)	(677)
Acquisition cost, end of year	7.662.295	7.563.119
Depreciations		
Depreciations, beginning of year	(1.537.227)	(1.422.430)
Revaluations	0	0
Depreciations for the year	(36.746)	(115.440)
Reversed depreciations on decrease for the year	10.963	644
Depreciations, end of year	(1.563.010)	(1.537.226)
Depreciations		
Depreciations, beginning of year	(3.261.118)	(3.132.418)
Increase in depreciations for the year	(127.894)	(128.733)
Decrease in depreciations for the year	17.360	32
Depreciations, end of year	(3.371.652)	(3.261.119)
Amortisations and depreciations, end of year	(4.934.662)	(4.798.345)
Book value as of 31 December	2.727.633	2.764.773

Note 8 Property, plant and equipment under development	2022	2021
Acquisition cost		
Beginning of year	110.963	130.178
Increase for the year	158.847	133.799
Decrease for the year	(127.488)	(153.014)
Acquisition cost, end of year	142.322	110.963
Depreciations		
Depreciations, beginning of year	(46.319)	0
Revaluations	0	0
Depreciations for the year	(1.391)	(41.889)
Operational assets	(1.822)	(4.429)
Depreciations, end of year	(49.531)	(46.319)
Book value as of 31 December	92.791	64.645

Note 9 Vehicles and equipment		
Acquisition cost		
Beginning of year	89.553	83.113
Increase for the year	6.124	6.682
Decrease for the year	(2.127)	(242)
Acquisition cost, end of year	93.550	89.553
Amortisations and depreciations		
Depreciations, beginning of year	(73.967)	(67.687)
Depreciations for the year	(5.105)	(6.522)
Depreciations for the year	0	0
Reversed depreciations on decrease for the year	2.127	242
Amortisations and depreciations, end of year	(76.945)	(73.967)
Book value as of 31 December	16.605	15.586

#### **DKK 1,000**

Note 10 Inventories	2022	2021
Fuel oil	23.434	21.478
Lubricating oil	5.836	4.242
Spare parts and consumables	58.220	49.590
Total	87.490	75.310
Note 11 Accounts receivable from sales and services		
The gross amount of DKK 128.7 million is adjusted by DKK 7.3 million to cover losses on doubtful debtors. The corresponding adjustment amounted to DKK 7.1 million at the end of 2021. The adjustment is deducted from debtors with the oldest balances.		

Age distribution (DKK 1,000)		
0-30 days	99.494	100.673
30 days-½ year	14.780	14.780
½-1 year	3.534	3.534
Older	4.644	4.644
Total	122.452	123.631

#### Note 12 Other receivables

The item other receivables consists primarily of deposits paid.

Note 13 Adjustment of fixed asset values	2022	2021
Adjustment of fixed asset values 1998	1.831.067	1.831.067
Adjustment of fixed asset values 2004	742.294	742.294
Adjustment of fixed asset values 2005	(36.438)	(36.438)
Adjustment of fixed asset values 2006	7.851	7.851
Adjustment of fixed asset values 2007	(14.594)	(14.594)
Adjustment of fixed asset values 2008	4.682	4.682
Adjustment of fixed asset values 2009	2.882	2.882
Adjustment of fixed asset values 2011	(6.770)	(6.770)
Adjustment of fixed asset values 2018	(1.216.206)	(1.216.206)
Total	1.314.768	1.314.768
Note 14 Retained earnings		
Carried over from previous year	112.310	250.560
Profit/loss for the year	29.126	(138.250)
Grants from the National Treasury		
Construction grants for the year	0	0
Net grant for the year	0	0
Total	141.436	112.310

#### Note 15 Long-term debt due after 5 years

Long-term debt maturing after 5 years amounts to DKK 1,286 million. In 2021, the amount was DKK 1,295 million.

#### Note 16 Contingent liabilities/receivables and contractual obligations

Residential transportation obligations in the event of employment termination have not been calculated.

#### Significant contractual obligations:

Significant contractual obligations are entered into on an ongoing basis for construction projects that are financed through the Finance Act, or where permission has been granted by the Government of Greenland to self-finance the construction projects.

Nukissiorfiit is continuously involved in joint land development projects in collaboration with municipalities with agreements on sharing common costs. In these cases, there may be delays or errors in execution that may have a financial impact. Nukissiorfiit has a case of this type from 2018, which is recognised as a contingent liability of DKK 5 million.

Note 17 Payments to and from the National Treasury	2022	2021
Payments to the National Treasury from Nukissiorfiit		
Repayments on long-term loans	70.000	70.200
Interest on construction loans	70.813	75.127
Interest on drawing rights	0	0
Positive DAU effect in the National Treasury	140.813	145.327
Change in the balance on the drawing right	0	93.673
Positive liquidity impact in the National Treasury	140.813	239.000
Payments from the National Treasury to Nukissiorfiit		
Net grant for the year	(63.451)	(58.178)
Appropriations for capital projects	0	0
Long-term loans taken out	(60.000)	(60.000)
The National Treasury's share of street lighting	(5.349)	(6.459)
Negative DAU effect in the National Treasury	(128.800)	(124.637)
Change in the balance on the drawing right	(25.813)	0
Positive liquidity impact in the National Treasury	(154.613)	(124.637)
Nukissiorfiit's net DAU effect in the National Treasury	12.013	20.690
Nukissiorfiit net liquidity impact in the National Treasury	(13.800)	114.363



### APPENDIX 1

#### Distribution Statement

### THE DISTRIBUTION STATEMENT HAS BEEN AUDITED BY DELOITTE, WHO HAVE PROVIDED THE DISTRIBUTION STATEMENT WITH A SEPARATE AUDITOR'S REPORT.

Nukissiorfiit's annual distribution accounting shows the costs Nukissiorfiit incurs for the production and supply of electricity, water and heating at the individual localities. The unit costs for electricity, water and heating indicate the total cost per unit, i.e. per m3 of water, per kWh of electricity and per MWh of heating.

Unit costs include cost of sales, personnel costs, capacity costs, depreciation, depreciations and interest. The costs vary greatly from location to location. This is partly because production methods vary and partly because sales are very low in some places, resulting in high unit costs. There is a high cost sensitivity in the calculation of unit costs in places where relatively small amounts of energy and water are sold. Nukissiorfiit's dimensioning of its plants is based on customer needs, expressed through the expected local demand from private households and businesses, including the fishing industry, which often determines the size of the plants. In general, there is a positive correlation between unit costs and demand and economies of scale, which means that society usually benefits from the high demand of the fishing industry, even though it may lead to larger facilities than would be the case without the fishing industry.

The depreciation of DKK 1.6 billion in 2018 has, by its very nature, significantly changed the distribution accounts. In order to maintain consistency with the costs incurred for capital investments and thus provide a cost-oriented view of the production costs for each site, unit costs are calculated with the non-amor-

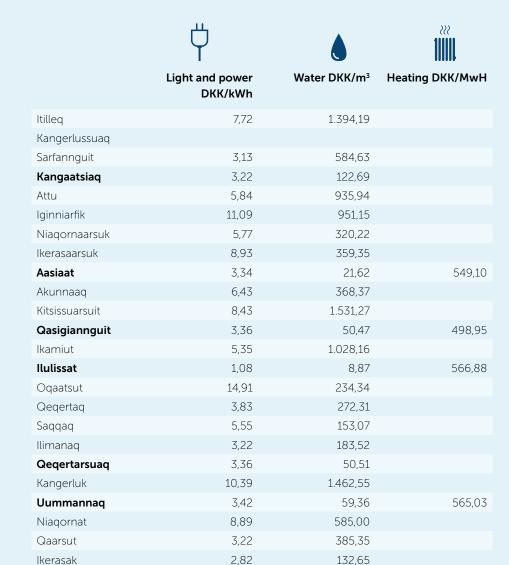
tised values, so that the full original depreciation is included in the unit costs shown.

The table on the next page shows the unit costs for all locations supplied by Nukissiorfiit in 2022. The distribution accounts are calculated on the basis of the principles specified in the Government of Greenland's Executive Order No. 22 of 22 December 2017 on the pricing of electricity, water and collective heating.

### APPENDIX 1

#### Production cost for each location

	Ϋ́		*** <b>!!!!!!</b>
	Light and power DKK/kWh	Water DKK/m <sup>3</sup>	Heating DKK/MwH
Nanortalik	4,45	69,51	642,81
Aappilattoq	6,65	269,58	
Narsaq Kujalleq	4,17	1.154,63	
Tasiusaq	10,25	1.662,35	
Ammassivik	9,41	632,07	
Alluitsup Paa	5,96	1.076,69	
Qaqortoq	2,33	31,21	754,90
Saarloq	12,95	548,12	
Eqalugaarsuit	23,82	1.214,23	
Qassimiut	9,63	229,41	
Qorlortorsuaq			
Narsaq	0,99	60,35	20,59
Igaliku	13,01	419,93	
Narsarsuaq			
Qassiarsuk	5,39	1.147,27	
Paamiut	3,33	39,35	684,84
Arsuk	5,95	355,31	
Nuuk	0,75	17,13	234,79
Qeqertarsuatsiaat	3,72	213,08	14,56
Kapisillit	6,13	564,05	
Maniitsoq	2,70	24,47	595,13
Atammik	5,77	536,29	
Napasoq	10,23	972,47	
Kangaamiut	3,48	192,12	
Sisimiut	0,86	9,51	610,89



2,42

265,87

Saattut







		9	***************************************
	Light and power DKK/kWh	Water DKK/m <sup>3</sup>	Heating DKK/MwH
Ukkusissat	4,18	220,38	
Upernavik	3,96	156,32	357,62
Upernavik Kujalleq	3,32	108,56	
Kangersuatsiaq	5,97	444,00	
Aappilattoq	4,25	91,73	
Nutaarmiut	21,04		
Tasiusaq	3,89	220,52	
Nuussuaq	2,77	69,90	
Kullorsuaq	3,87	376,88	
Naajaat	17,44		
Innaarsuit	2,99	154,81	
Qaannaq	5,29	639,38	789,60
Savissivik	7,07	755,55	
Siorapaluk	5,58	2.580,65	
Qeqertat	60,56		
Tasiilaq	2,21	36,73	750,54
Sermiligaaq	5,18	571,50	
Isortoq	12,17	945,69	
Kulusuk	9,72	98,54	
Tiniteqilaaq	7,24	1.490,20	
Kuummiut	3,09	47,10	
Ittoqqortoormiit	4,29	236,59	

Information is lacking in places because Nukissiorfiit does not sell the product in question in the locality.

### APPENDIX 2

# Diesel and CO<sub>2</sub> Accounts for Electricity and Heating Production

Nukissiorfiit's diesel and  $\mathrm{CO}_2$  accounts show how much diesel Nukissiorfiit uses for the electricity and heating supply in the individual locations, as well as how much  $\mathrm{CO}_2$  is emitted from this supply. The amount of diesel used – and therefore the amount of  $\mathrm{CO}_2$  emitted – varies from location to location. The diesel and  $\mathrm{CO}_2$  accounts illustrate that Nukissiorfiit uses significantly less diesel in cities with hydropower and other renewable energy sources. The diesel and  $\mathrm{CO}_2$  accounts are not part of Nukissiorfiit's financial statements and are therefore not audited.





U	U	U	U	U	ľ	

	El		Varme		
	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	
Nanortalik	0,293	0,780			
Aappilattoq	0,297	0,789			
Narsarmijit	0,348	0,925			
Tasiusaq	0,367	0,977			
Ammassivik	0,305	0,811			
Alluitsup Paa	0,343	0,911			
Qaqortoq	0,025	0,067	0,182		
Saarloq	0,547	1,455			
Eqalugaarsuit	0,318	0,845			
Qassimiut	0,402	1,069			
Narsaq	0,025	0,068			
Igaliku	0,098	0,261			
Qassiarsuk	0,301	0,800			
Paamiut	0,270	0,717	0,336	0,19	
Arsuk	0,319	0,849			
Nuuk	0,006	0,016	0,023	0,01	
Qeqertarsuatsiaat	0,375	0,998			
Kapisillit	0,328	0,873			
Maniitsoq	0,269	0,716	0,276	0,16	
Atammik	0,264	0,703			
Napasoq	0,284	0,756			
Kangaamiut	0,193	0,513			
Sisimiut	0,004	0,011	0,108	0,062	
Itilleq	0,211	0,562			
Sarfannguit	0,220	0,584			
Kangaatsiaq	0,253	0,673			





	<b>-</b> \		Tarine		
	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	
Attu	0,347	0,924			
lginniarfik	0,221	0,589			
Niaqornaarsuk	0,293	0,778			
Ikerasaarsuk	0,510	1,356			
Aasiaat	0,304	0,809	0,364	0,208	
Akunnaaq	0,380	1,011			
Kitsissuarsuit	0,180	0,478			
Qasigiannguit	0,266	0,708	0,258	0,147	
Ikamiut	0,248	0,659			
Qeqertaq	0,199	0,530			
Saqqaq	0,194	0,517			
Ilimanaq	0,197	0,524			
Qeqertarsuaq	0,303	0,806			
Kangerluk					
Uummannaq	0,278	0,741			
Niaqornat	0,453	1,205			
Qaarsut	0,225	0,598			
Ikerasak	0,206	0,549			
Saattut	0,254	0,676			
Ukkusissat	0,295	0,786			
Upernavik	0,312	0,829			
Upernavik Kujalleq	0,189	0,503			
Kangersuatsiaq	0,081	0,215			
Aappilattoq	0,218	0,581			
Nutaarmiut	0,810	2,154			





	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	Oil consumption litres per kWh	Kg. CO <sub>2</sub> emitted per kWh sold	
Tasiusaq	0,364	0,967			
Nuussuaq	0,259	0,688			
Kullorsuaq	0,323	0,860			
Naajaat	0,518	1,378			
Innaarsuit	0,246	0,654			
Qaanaaq	0,331	0,879	0,379	0,217	
Savissivik	0,167	0,444			
Siorapaluk	0,322	0,856			
Qeqertat	2,222	5,910			
Tasiilaq	0,023	0,060			
Sermiligaaq	0,309	0,821			
Isertoq	0,373	0,992			
Kulusuk	0,546	1,452			
Tiilerilaaq	0,397	1,057			
Kuummiut	0,194	0,517			
Ittoqqortoormiit	0,303	0,806			

Information is lacking in places because Nukissiorfiit does not sell the product in question in the locality.

