# **ANNUAL REPORT** 2021



alla:

IT'S OUR OWN ENERGY

# PREFACE



#### We have the energy

All eyes are on Greenland and its vast natural resources. The resources are not only sufficient for supplying all of Greenland with renewable energy but also other parts of the world. Through almost three decades, Nukissiorfiit has supplied Greenland's population with renewable energy, making us the natural partner when it is about utilization of natural resources for energy. The plentiness of natural resources makes Greenland a potentially main exporter of energy. The technology for exporting energy is developing fast and international players are seeing the potential in Greenland.

In the capital of Nuuk an outage lasted several days in November and December 2021. An outage of this magnitude has not occurred since the establishment of the hydropower plant in 1993 and caused attention and frustration beyond Nuuk's town limits. As a result, both internal and external measures entailed and set a renewed focus on Nukissiorfiit's need to reinvest.

Ahead of us lies the important task of securing a more robust national supply. This goal will continue to be the focus of Nukissiorfiit in the following years. The year 2021 has indeed been a year with focus on renewable energy. A year of important decisions for increased sustainable transition. Inatsisartut voted for and decided that hydropower should be established to supply Qasigiannguit and Aasiaat. Also, the hydropower plant at Buksefjorden/ Utoqqarmiut Kangerluarsunnguat, supplying Nuuk, should be expanded. These projects will largely impact the share of renewable energy in the public supply and entail reduced use of fossil fuel, thus reducing the emission of CO<sup>2</sup> in Greenland.

Reduction of diesel prices in 2021 has affected the transition to renewable energy and made it less attractive financially. Production of renewable energy entails major establishing costs and minor variable costs. The great advantages of renewable energy can only in part be financially quantified, as the emission from oil-based energy production is as yet free. Nukissiorfiit's goal and overall ambition of introducing renewable energy wherever possible is more relevant than ever – the energy must be our own.

Nukissiorfiit welcomed two new directors in 2021, viz. Mr. Hans Rowedder, former district manager for Nuuk, as Chief Technology Officer, CTO, and Mr. Pierre Vassard, former employee of the Health Management, as Chief Financial Officer, CFO, replacing Mr. Kaspar Mondrup, CEO, who left his position at the end of January 2022. Mr. Rowedder worked as an interim CEO of Energy until Ms. Cicilie Senderovitz was employed on 1st May 2022. Cecilie Senderovitz was born and raised in Greenland and has solid experience from the supply industry in Denmark.

During 2021, Nukissiorfiit's employees have contributed solidly and deserve recognition. In many ways, 2021 was challenging and we are happy that our employees work hard and undeterred to secure pure water, electricity and heating for the Greenland population and business world. Thank you very much, indeed.



Cicilie Senderovitz CEO, Energy



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# FINANCIAL HIGHLIGHTS AND KEY RATIOS

DKK mio.
RESULT
Net turnover
Cost of sales
Operating costs
Amortisations
Interest rates
Profit for the year before operating grants
Operating grants
Profit for the year after operating grants
BALANCE SHEET
Intangible assets
Property. plants and equipment
Current assets
Equity
Long-term debt
Balance sheet total
CASH FLOW
Operating activity
Investing activity
Financing activity
Change in liquidity
KEY RATIOS
EBITDA
Profit before extraordinary items
Return on investment before operating grants
Equity ratio
Nukissiorfiit net liquidity impact on Landskassen (Greenland
Treasury)
STATISTICS
Sale of electricity to ordinary consumers (GWh)
Sale of electricity to the fishing industry (GWh)
Sale of water to ordinary consumers (mio. m <sup>3</sup> )

Sale of water to ordinary consumers (mio. m<sup>3</sup>) Sale of water to the fishing industry (mio. m<sup>3</sup>) Sale of heating and district heating (GWh) Number of full-time employees

2021	2020	2019	2018	2017
787,7	817,8	749,4	781,9	836,1
-183,9	-196,7	-178,8	-196,2	-204,5
-372,9	-361,0	-371,3	-368,8	-309,8
-292,6	-334,4	-123,0	-127,0	-241,9
-75,6	-78,6	-81,3	-85,4	-92,9
-138,3	-152,9	-5,0	4,6	-12,9
0,0	0,0	0,0	0,0	13,7
-138,3	-152,9	-5,0	4,6	0,8
5,4	0,0	0,5	1,5	16,0
2,845,0	3,007,0	2,841,4	2,773,3	4,320,5
316,5	293,0	226,5	246,6	266,5
1,464,2	1,602,5	1,371,2	1,376,2	2,996,6
1,547,0	1,557,7	1,527,3	1,480,0	1,466,4
3,166,9	3,300,0	3,068,4	3,021,3	4,603,0
192,8	147,8	111,8	165,1	189,6
-136,0	-115,3	-190,1	-190,2	-141,3
-103,9	24,5	83,2	18,7	-69,8
82,6	57,0	4,9	-6,5	-21,6
229,9	260,2	199,3	217,0	321,9
-138,3	-152,9	-5,0	4,6	-12,9
-4,4%	-4,8%	-0,3%	0,3%	-0,3%
46,2%	48,6%	44,7%	45,5%	65,1%
113,2	-25,2	-74,1	-10,4	198,0
210	207	196	199	193
31	34	39	39	36
2,6	2,6	2,5	2,5	2,4
2,4	2,6	2,4	2,3	2,0
323	342	315	342	320
416	437	405	395	374

# STATEMENTS

### **Management Statement**

This day, we have reviewed and approved the annual report for the financial year 1st January - 31st December 2021, for Nukissiorfiit.

The Annual Report has been prepared in accordance with the Regulation of the Greenlandic Parliament No. 24 of December 22nd, 2017, on the account reporting for the Government of Greenland's net managed companies.

The Regulation stipulates that the Annual Report must be presented in accordance with current regulations concerning the Financial Statements Act in Greenland, with the deviations resulting from the company being owned by the Government of Greenland, which is operated on the basis of social considerations, regulated under special law. We hereby declare:

- That the Annual Report is true i.e. Annual Report has no significant omissions or errors.
- That the transactions covered by the financial reporting are in accordance with laws and other regulations as well as signed agreements and usual 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 Inatsisartut's approval.

#### Nuuk, 11<sup>th</sup> May, 2022

Department for Agriculture, Self-sufficiency, Energy and Environment

Mette Skarregaard Head of Department

Nukissiorfiit

Cicilie Senderovitz CEO, Energy

### Independent Auditor's Endorsement

#### TO INATSISARTUT (PARLIAMENT)

We have audited the Nukissiorfiit's Annual Accounts for the period January 1st - December 31st, 2021, comprising profit and loss statement, balance sheet, cash flow statement and notes including applied accounting policies, pp 48-63. The Annual Accounts have been prepared in accordance with the Regulation of the Greenlandic Parliament No. 24 of December 22th, 2017, on the financial reporting for the Government of Greenland net managed companies (the Regulation). The Regulation stipulates that the annual report must be presented in accordance with the regulations in force at any time concerning the Financial Statements Act in Greenland, with the deviations resulting from the company being owned by the Government of Greenland, which is operated on the basis of social considerations, regulated under special law.

it is our oponion that the Annual Accounts give a true and fair view of the company's assets, liabilities and financial position at December 31<sup>st</sup> 2021 and of the result of the comapny's activities for the financial year January 1st 2021 - December 31st 2021 in accordance with the Regulations of the Greenlandic Parliment No. 24 of December 22th, 2017, on the accounting management for the Government of Greenland's autonomous companies which is operated on the basis of social considerations, regulated under special law.

#### **Basis for Conclusion**

We conducted our audit in accordance with International Standards on Auditing and the additional requirements applicable in Greenland as well as the standards for public audit, as the audit is carried out in accordance with this Regulation. Our responsibility under these standards and requirements is described in more detail in the auditor's report section "Auditor's responsibility for the audit of the Annual Accounts". We are independent of the company, in accordance with the international ethical rules for auditors (IESBA's Ethical Rules) and the additional requirements applying in Greenland, just as we have fulfilled our other ethical obligations in relation to these rules and requirements. It is our opinion that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Highlighting matters related to the audit

Nukissiorfiit has included appendices 1-3 in the accounts. These appendices have not been audited.

### Management's Responsibility for The Annual Accounts

Management is responsible for the preparation of Annual Accounts that gives a true and fair view in accordance with the Regulation. Management is also responsible for the internal control which it considers necessary in order to prepare Annual Accounts free from material misstatement, whether due to fraud or error.

On preparing the Annual Accounts, the management is responsible for assessing the company's ability to continue operations; disclosing information concerning continued operations, where relevant; and preparing the Annual Accounts on the basis of the accounting policy concerning continued operations, unless the management either intends to liquidate the company, discontinue operations, or has no other realistic option.

### Auditor's Responsibility for the Audit of the Annual Accounts

Our aim is a high degree of certainty that the overall Annual Accounts are free from material misstatement, whether due to fraud or error, and to present an auditor's endorsement with an opinion. A high degree of certainty is a high level of certainty, but it does not guarantee that an audit performed in accordance with international auditing standards and the additional requirements applying in Greenland, as well as the standards for public audit, will always reveal any material misstatement. Incorrect information may arise as a consequence of fraud or error and may be considered material if it can reasonably be expected that it may individually or overall influence the financial decisions taken by users of the accounts on the basis of the Annual Accounts.

As an element of the audit, which is performed in accordance with international auditing standards and the additional requirements applying in Greenland, as well as the standards for public audit, we perform expert assessments and maintain professional scepticism during the audit. In addition:

• We identify and assess the risk of material misstatement in the Annual Accounts, whether due to fraud or error, design and perform audit procedures in reaction to these risks, and obtain audit evidence that is sufficient and appropriate to form a basis for our opinion. The risk of failing to discover material misstatement due to fraud is higher than for material misstatement due to errors, since fraud may include conspiracy, forgery of documents, deliberate omissions, misrepresentation or internal control failure.

• We obtain an understanding of the internal control with relevance for the audit, in order to perform audit procedures that are appropriate in the circumstances, but not to express an opinion concerning the effectiveness of the company's internal control.

• We consider whether the accounting policies applied by the management are appropriate, and whether the accounting estimates and related information prepared by the management are reasonable.

• We conclude whether the management's presentation of the Annual Report according to the accounting policy of continued operation is reasonable, and whether on the basis of the audit evidence obtained there is significant uncertainty concerning events or circumstances that may lead to significant doubt concerning the ability of the company to continue operations. If we conclude that a significant uncertainty exists in our audit endorsement, we must draw attention to information about this in the Annual Report or, if such information is not sufficient, modify our opinion. Our opinion is based on the audit evidence achieved up to the date of our audit endorsement. Future events or circumstances may entail, however, that the company cannot continue operations.

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

We communicate with executive management concerning the planned scope and timing of the audit, as well as significant audit observations, including any material deficiencies in the internal control that we identify during the audit.

#### Statement on the Management's Review

The management is responsible for the management's review.

In addition, our responsibility is to consider whether the management's review contains required information in accordance with the Danish Financial Statements Act.

Our conclusion on the Annual Accounts does not include the management's review, and we do not express any form of conclusion with certainty about the management's review.

Connected to our audit of the Annual Accounts, it is our responsibility to read the management's review, and in this connection consider whether the management's review is substantially inconsistent with the Annual Accounts or our knowledge obtained during the audit or in some other way seems to contain material misstatement. Based on the work done, we believe that the management's review is in accordance with the annual accounts and has been prepared in accordance with the requirements of the Financial Statements Act. We have found no material misstatement in the management's review.

#### DECLARATION ACCORDING TO OTHER LEGISLATION AND REGULATIONS

### Representation on Legal-Critical Audit and Performance Audit

The management is responsible for ensuring that the transactions covered by the financial reporting are in accordance with announced grants, laws and other regulations, as well as with entered into agreements and usual practice. The management is also responsible for ensuring that due account is taken of financial considerations in the management of the funds covered by the financial statements. In this connection, the management is responsible for establishing systems and processes that support economy, productivity and efficiency.

Connected to our audit of the Annual Accounts, our responsibility is to carry out legal-critical audits and management audits of selected issues in accordance with the standards of public audit. In our legal-critical audit, we verify with a high degree of certainty pertaining to the selected issues whether the investigated transactions covered by the financial reporting are in accordance with the relevant provisions of the appropriations, laws and other regulations, as well as agreements concluded and usual practice. In our performance audit, we assess with a high degree of certainty whether the systems, processes or dispositions examined support the financial considerations that are due in the management of the funds and operations of the areas covered by the Annual Accounts.

If, based on the audit, we conclude that there are significant critical remarks, we must report on this in this opinion.

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

#### Nuuk, 11th May 2022

Margar Villen

Chartered Accountant

Per Timmermann

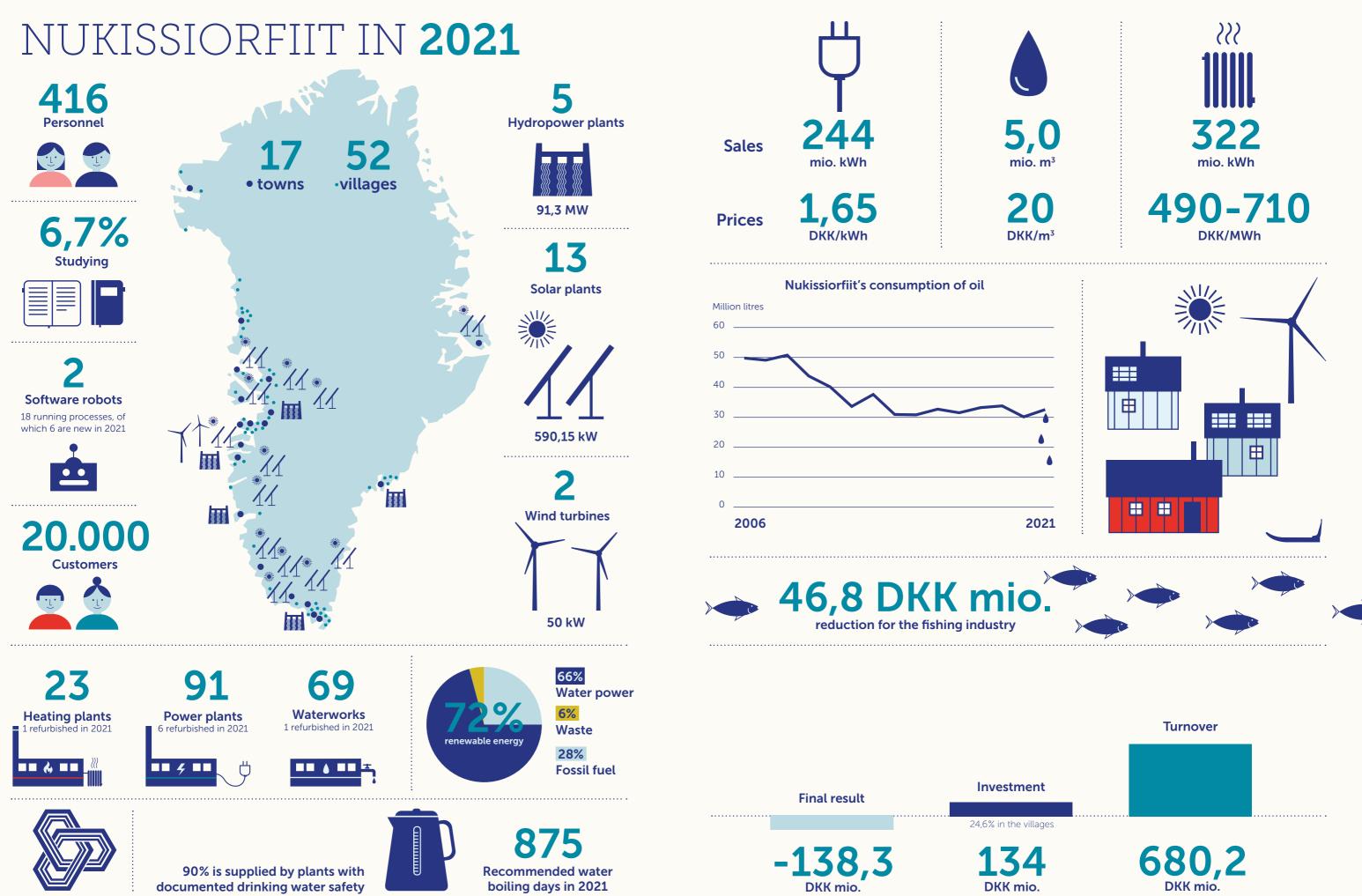
MNE-nr. 18652

### Deloitte Chartered Accountants -nr. 33 96 Bo Colbe Per

Chartered Accountant MNE-nr. 24634







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# MANAGEMENT STATEMENT

Through seven decades Nukissiorfiit has supplied Greenland with electricity, water and heating.

Since 1949 Nukissiorfiit has essentially impacted the development of the community, having been a central part of the daily life of all Greenland families and businesses by securing a stable supply of electricity, water and heating for the Greenland society.

The mission remains the same but the way of going about it has developed as have society and technology. Today, renewable energy is an important part of Nukissiorfiit's business and will grow even more important in the future. Not only does this benefit the climate, it also secures financial sustainability of Nukissiorfiit and society.

Nalakkersuisut sets the framework for Nukissiorfiit's work in the field of supply and renewable energy. Nukissiorfiit's experience shows that the cost of energy production is lower for renewable energy resources despite higher costs connected with hardware purchase. Thus, Nukissiorfiit runs a healthier business, and the production costs are decreasing – all for the benefit of our customers.

The share of renewable energy in the country is increased through the efforts within four main areas of focus.

- Establishment of hydropower plants as the primary source of supply at towns and settlements
- Conversion from diesel-based power plants to hybrid plants with renewable energy plants and battery banks
- Conversion of customer supply from private diesel-based heating to public renewable energy in towns with hydropower
- Electrification of the transport sector in towns with hydropower.

Figure 1: renewable energy amounts to 72% of Nukissiorfiit's supply in 2021. Figure 2: the share of renewable energy for the whole country amounts to 20%.

The public energy supply includes Nukissiorfiit's production and shows that approx. 72% is based on renewable energy, primarily hydropower. Other sources of renewable energy are still too insignificant to be stated.

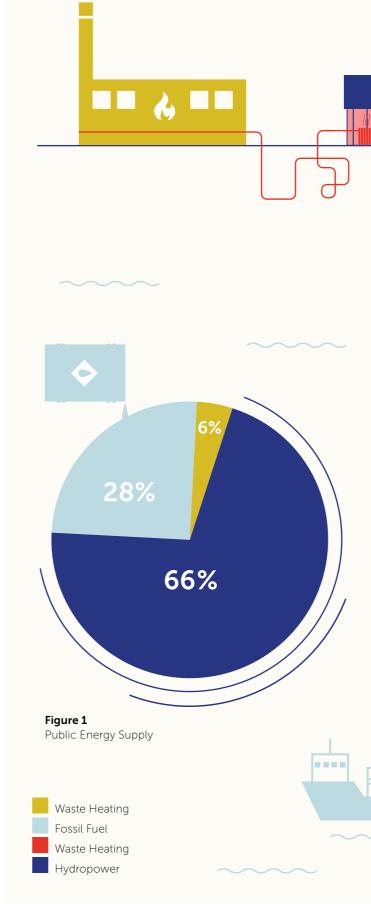
28% of Nukissiorfiit's energy production are based on fossil fuel. Changing this distribution require large investments in plants for renewable energy which have not been made in recent years. However, with Inatsisartut's adoption of the legislative proposal for expansion of the hydropower plant at Nuuk (Utoqqarmiut Kangerluarsunnguat) and establishment of Kuussuup Tasia to supply Qasigannguit and Aasiaat, the share of renewable energy in Nukissiorfiit's supply is expected to increase significantly.

Diesel costs for the country's power plants are a major item in Nukissiorfiit's accounts. In 2021, 164 million DKK was spent on fossil fuel to supply towns and settlement without renewable energy plants. This amount is a one-time investment that could possibly have been invested in renewable energy plants for the benefit of the climate and social economy.

The survey of Greenland's total energy consumption shows energy consumption in the public supply, the private supply, household consumption, transport sector, production trade, along with trading and service.

Access to pure drinking water is a determinant of public health and societal development. Nukissiorfiit must secure drinking water that meets the quality requirements in force. For a good many years, Nukissiorfiit has made sure that the number of boiling days has decreased. The standardization of settlement hydro plants and the implementation of the quality control system of Documented *Drinking Water Safety* (DDS) have greatly contributed to this decrease.

There is still great need and potential for development and modernisation within the hydro area but Nukissiorfiit's financial framework and the current pricing of the product are challenging, and involve major loss.



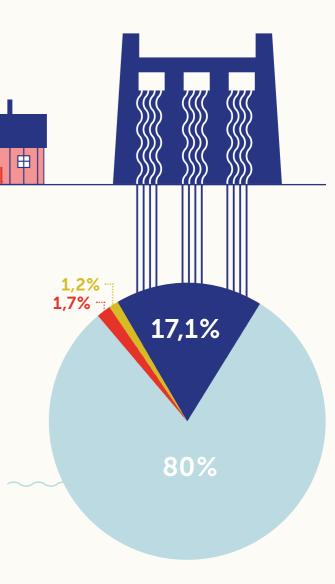


Figure 2 Greenland's total Energy Consumption



#### Strategy

To support and promote the strategic work in Nukissiorfiit, the management team was introduced to a new management model in the autumn: Dreams and Details.

The strategic work and concrete objectives are anchored in 3 new framework-setting power centres:



2. Execution and Efficiency

3. Data

Many of the goals and sub-goals that Nukissiorfiit has worked on in the 2018-2021 strategy have made significant progress. The previous objectives, where work is still ongoing, have naturally been transferred to the new power centres and frameworks. These objectives are expected to support a motivating, structured and optimised progress in the work in the coming years, where the main task for Nukissiorfiit is to focus on our core business – to supply electricity, water and, not least, to ensure a robust supply throughout Greenland.

#### Digitisation

#### Improved Production Data

In 2021 Nukissiorfiit has focused on improving the production data to clarify the connection between production and sales of its products. Hereby, production increases and loss decreases. This process will be continued and will eventually entail better operation economy at Nukissiorfiit's plants.

#### Robotics

Like so many other companies, Nukissiorfiit has had and still have focus on software robots to reduce costs, increase efficiency, quality and speed through automation and so-called robotics. Many manual processes have been automated resulting in 4,300 hours being released equalling almost two work years. Hours have been released primarily in the debtor and invoicing departments entailing surplus for other tasks.

#### Artificial Intelligence as a part of Customer Service

Focus is also on improved customer service through artificial intelligence and IT. Nukissiorfiit makes the customers more self-reliant by offering digital solutions. Customers are able to download invoices and sign up for online payment. Simultaneously, it is possible to settle invoices through BetalingsService, by credit card, Mobile Pay and FI cards. In July, 2021, Nukissiorfiit started sending payment notices by software robot.

### Organisational development

In 2021, competence development has been a key focus throughout Nukissiorfiit. The company makes ongoing assessments of current and future need for competence. A new MUS concept (annual performance review), called Umimmak, is used to strengthen the mapping of the individual employee's competences.

Umimmak presents the manager with a stronger foundation for developing the employee's competences, in interaction with the employee. The new concept will be extended to the entire organisation in 2022.

The work with renewable energy is becoming more and more important in Nukissiorfiit and places new demands on the competences of Nukissiorfiit's employees. Nukissiorfiit is therefore working continuously to ensure relevant further training and skills development for our settlement passers and other personnel.

In 2021, there has been an increased strategic focus on recruitment, and Nukissiorfiit has launched a campaign video under the title "It's our own energy". At the same time, Nukissiorfiit has been actively present at Greenlandic and Danish educational institutions and participated in the Greenlandic job fairs.

**Organisational Restructuring** 

Nukissiorfiit are managed by a CEO of Energy, a Chief Technology Officer, CTO, and a Chief Financial Officer, CFO.

During the year Nukissiorfiit underwent a minor organisational restructuring as Digitization was moved from the technical support division to the column of the CEO of Energy.

The CEO of Energy are now responsible for the management secretariat, sales and marketing as well as digitization. The remaining departments of the head office are the technical support division and the administrative support division, whereas the districts make up the production and distribution division.

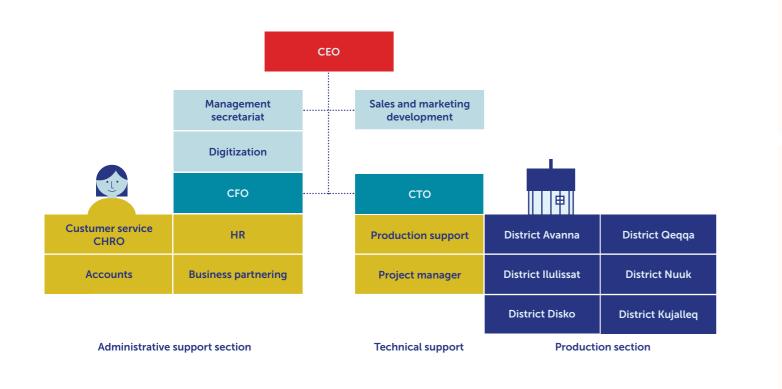
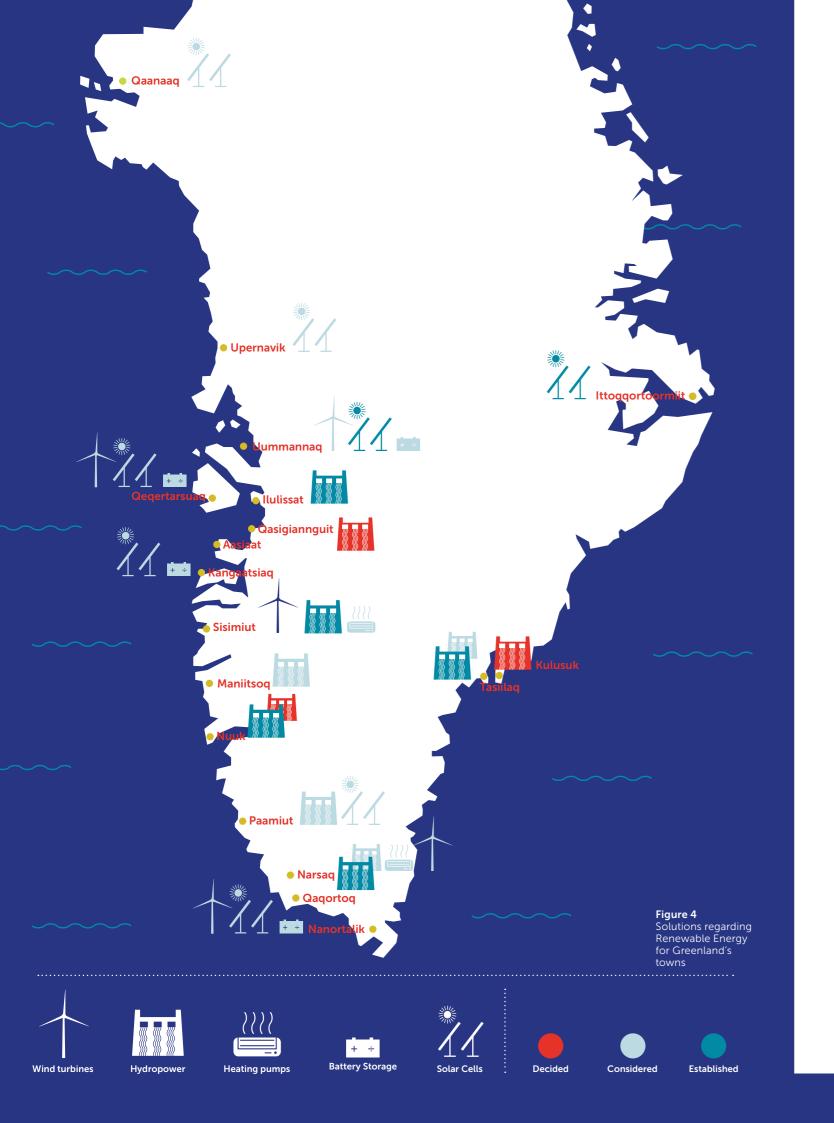


Figure 3 Nukissiorfiit's organisation chart as of 31st December, 20211



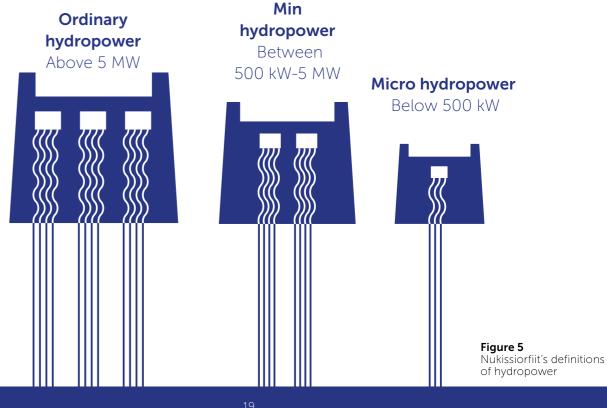


### **Energy Supply**

Nukissiorfiit operates on the basis of Naalakkersuisut's goal of expanding renewable energy wherever possible. The starting point is mapping of all potential renewable energy in the country. Nukissiorfiit applies a map showing the most opportune sources of renewable energy for the individual towns and settlements, including establishment of hydro power, solar energy, wind power. Also, the potential for energy from waste incineration is considered. Projects are prioritized by balancing the possible amount renewable energy, the economic rate of return and the security of supply. Nukissiorfiit's financial position, however, makes investments in renewable energy difficult and limits the national conversion from use of fossil fuel to renewable energy.

At present, Nukissiorfiit supplies six towns with hydropower. Uummannaq, Ittoqqortoormiit, Atammik, Kangerluk, Saqqaq, Qegertag and Qegertarsuatsiaat are supplied by solar cells in combination with diesel. Igaliku, Ammassivik, Ikerassarsuk and Eqalugaarsuit are supplied by solar cells, a battery bank and diesel. Furthermore, Nukissiorfiit has access to two wind turbines in a test centre near Sisimiut.

The following paragraphs describe Nukissiorfiit's energy supply in towns and settlements.



#### Hydropower is Essential for Reduced CO<sup>2</sup>

Nukissiorfiit supplies Nuuk, Sisimiut, Ilulissat, Qagortog, Narsag and Tasiilag with hydropower. Hydropower constitutes by far the majority of Nukissiorfiit's production of renewable energy. Presently, other renewable sources cannot make up the primary supply in towns and settlements - for comparison.

This derives from other renewable energy technologies' dependency on physical conditions, such as the sun shines and the wind blows, which variate naturally. Storage of the energy calls for investment in batteries, as it is not possible to control the availability of energy.

Opposite this, hydropower is a stable source of supply utilizing the energy that is created from falling or flowing water. Greenland has good conditions for hydropower because of its many locations with huge amounts of water and altitude differences, facilitating the utilization of the created energy. Depending on the amount of water, availability, and the reservoir not being frozen, it is possible to use hydropower all year and make this base the primary source of supply. Furthermore, it is possible to dam up the reservoir and form a natural energy bank to be used when needed.



Nukissiorfiit'sHydroelectricPlantsVandkraftværket ved Buksefjorden var færdigt i 1993 og har en<br/>kapacitet på 45 MW. Værket sparer hvert år 35 mio. liter diesel, og<br/>over 93.000 tons CO<sup>2</sup>. I sin levetid har vandkraftværket sparet<br/>samfundet for afbrænding af 870 mio. liter diesel og udledning af<br/>2,3 mio. tons CO<sup>2</sup>. Med den besluttede udvidelse kommer<br/>vandkraftværket i Buksefjorden ved Nuuk til at øge kapaciteten til<br/>100 MW.

Since 2010, more energy has been produced than the amount of water (energy) flowing to the reservoir lake which makes the decision essential for Nuuk's future energy supply. At the autumn session, Inatsisartut decided to expand the hydroelectric plant by a new tunnel to increase the water supply to the plant as well as a power station in addition to the existing to secure the future energy supply to the capital. These measures will increase the capacity of the hydroelectric plant to 100 MW. In 2027, when the expansion is complete, the town's need will again be met and there will also be further potential for conversion of diesel-based heating supply to interruptible electric heating along with increased potential for electrification of the transport sector.

#### **Outages at Nuuk**

Late November and early December a series of outages afflicted the supply at Nuuk, Nuussuaq and Qinngorput. The outages were caused by short circuits of the transmission between Nuuk and the hydroelectric plant at Buksefjorden/Utoqqarmiut Kangerluarsunnguat. Once, the weather conditions permitted an inspection, Nukissiorfiit found that the short circuits were due to a damaged cord cable, approx. 30 kilometres from Nuuk. Through well

planned efforts, Nukissiorfiit succeeded in carrying out a temporary repair allowing reestablishment of the supply. A number of factors contributed to making the supply of Nuuk's citizens via the diesel emergency supply an inappropriately lengthy process. Complexity and lack of experience with reconnecting to a dead grid (a grid that has been without electricity during a long period) were paramount factors. In addition, old equipment in the emergency plant proved challenging. Evaluation of the procedure has given rise to adjustments and improvements of internal processes regarding alerts, communication and reconnection manoeuvre. As of 2010, Sisimiut hydroelectric power plant holds a capacity of 15 MW which saves the community the import of 6.3 million litres of diesel. This equals in excess of 16,000 tonnes of CO<sup>2</sup> annually. During its life span the hydroelectric plant has spared the community import of 81.3 million litres of diesel and 215,500 tonnes of CO<sup>2</sup>.

As of 2010, **Sisimiut** hydroelectric power plant holds a capacity of 15 MW which saves the community the import of 6.3 million litres of diesel. This equals in excess of 16,000 tonnes of  $CO^2$  annually. During its life span the hydroelectric plant has spared the community import of 81.3 million litres of diesel and 215,500 tonnes of  $CO^2$ .

**Paakitsoq's** hydroelectric plant has been in operation since 2012. The plant holds a capacity of 22.5 MW (presently not fully utilized). This spares the community the import of 9 million litres of diesel, corresponding to 24,000 tonnes of CO<sup>2</sup> annually. The plant has saved the community a total of 85 million litres of diesel and hindered the emission of 226,160 tonnes CO<sup>2</sup>.



**Qorlortorsuaq** supplies Qaqortoq and Narsaq and has been operative since 2007/2008. The plant's capacity is 7.6 MW and has saved Nukissiorfiit the import of around 5 million litres of diesel in 2021 and prevented the emission of more than 13,000 tonnes of CO<sup>2</sup>. During its life span the Qorlortorsuaq plant has spared the community the import of 59 million litres of diesel and 156,640 tonnes of CO<sup>2</sup>.

**Tasiilaq's** plant is the smallest in the country with a capacity of 1.2 MW. It was establishe din 2004 and saves the community the annual import of 1 million litres of diesel. This equals 2,800 tonnes of  $CO^2$ . During its total life span this amount to 19 million litres of diesel and 50,680 tonnes of  $CO^2$ .

#### Qasigiannguit og Aasiaat

At the autumn session, 2021, Inatsisartut decided, besides the expansion of the hydroelectric plant at Buksefjorden/Utoqqarmiut Kangerluarsunnguat, the establishment of a hydroelectric plant at Kangersuneq, near Qasigiannguit, for the supply of Qasigiannguit and Aasiaat. The completion of these two hydroelectric plants will see an increase of renewable energy in the public supply.

Not only do the hydroelectric plants play an important role in the minimization of the use of fossil fuel and CO<sup>2</sup> emission but they are also important for social economy. In 2021, the hydroelectric plants saved community the purchase of 56.3 million litres of diesel – in the amount of 256.2 million DKK.

#### Windpower

Wind power is an excellent alternative in locations without waterpower. It is not, however, a constant resource and wind power is presently not included in the public supply. Wind turbines are being tested at Sisimiut and Nukissiorfiit measures wind at various settlements to ascertain if wind turbines could become part of the supply. Presently, wind is measured at Aasiaat, Qasigiannguit, Uummannaq and several settlements..

#### Solar Cells and Hybrid Plants at the Settlements

In 2020, Nukissiorfiit initiated efforts to expand the supply of renewable energy to small towns and settlements. Due to the pandemic this project was not completed until 2021.

As a result of this initiative, the energy supply of 10 settlements and small towns is now supplemented with renewable energy from solar cells and battery in four locations. Together with the plants at Nuuk and Igaliku solar cells now form part of the supply at 12 towns and settlements, totalling a capacity of 590.15 kWp, while battery plants total a capacity of 701 Kwp.

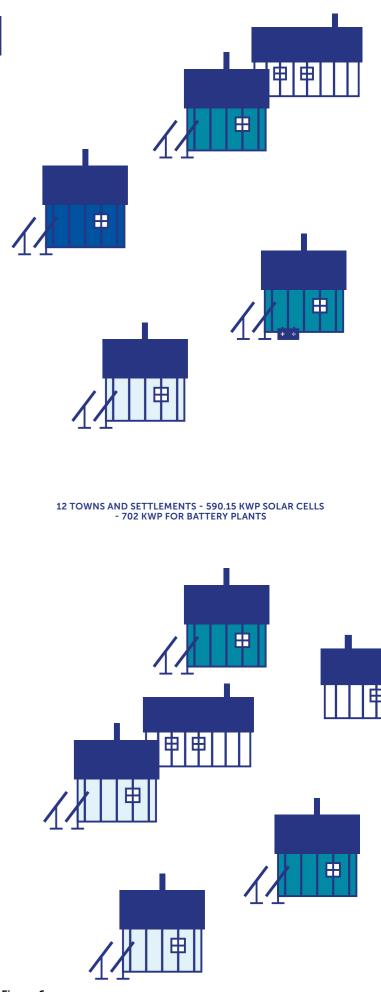


Figure 6 Solar Cells at Towns and Settlements 2021 saw the installation of solar cells at Ittoqqortoormiit, Qeqertarsuatsiaat, Qeqertaq and Eqalugaarsuit. In addition, solar cells were previously installed at Uummanaq, Ammassivik and Ikerassaarsuk.

#### Nukissalik Charging Stations

Early 2021, Nukissiorfiit launched Nukissalik, which is Nukissiorfiit's administrative system for charging networks for electrical and hybrid cars. Through a free membership, Nukissalik offers customers access to the public charging stations, placed in towns with hydropower. Also, members of Nukissalik are able to rent a charging station and have it mounted near their home or work place, Nukissalik granting them exclusive access to the station. Nukissalik's website gives a survey of the town's charging stations, showing location and availability at any given time. Also, the website grants the opportunity of supervising consumption, filling up of subscription and entering a completion time for the charging. Nukissalik had 500 customers at the end of 2021.

In 2021, Nukissiorfiit has set up 40 charging stations, distributed at Nuuk, Qaqortoq, Ilulissat og Sisimiut. The Nukissalik network now comprises 44 charging stations at the hydropower towns.

### Takeover of Mittaqfeqarfiit's Power Plants at Airport Settlements

Nukissiorfiit is expected to take over Mittarfeqarfiit's power plant at Narsarsuaq, Kangerlussuaq, Kulusuk and Qaarsut so that the future focus will be on airport operations solely.

In 2021, Nukissiorfiit inspected the airport settlements to assess the plants prior to the pending takeover and to make sure that Nukissiorfiit's standards are met and that plans for maintenance are prepared.

Formally, Nukissiorfiit took over the airport power plant at Kulusuk as of 1st January, 2021, and practically in the summer of 2021, following the installation of a new alarm system. To increase the share of renewable energy and reduce costs of supply of the settlement Nukissiorfiit is looking into the possibility of establishing a micro power plant to supply the airport, the hotel and the settlement itself. In the autumn of 2021, a superficial geotechnical examination was conducted which, however, proved inconclusive as to whether drilling would be the optimum solution for the micro power plant. Nukissiorfiit expects to carry out further geotechnical examinations during the summer of 2022. If the outcome proves positive the micro power plant will replace the two diesel power plants and be placed near the airport.





#### Water Supply

Nukissiorfiit supplies 17 towns and 52 settlements with water. The supply takes place by recovery of surface water from lakes, rivers, desalination of seawater and melting of ice floes. The drinking water is delivered via a piping network to central tap and increases the risk of water contamination. The analysis inhouses or directly into buildings with pipelines.

Nukissiorfiit's primary responsibility is securing pure drinking water for the public. Access to drinking water is also an impor-

#### **Documented Drinking Water Safety - DDS**

The implementation of Documented Drinking Water Safety (DDS) was complete at all towns in 2020. The process continues at the settlements.

10 settlements remain to be visited and Nukissiorfiit estimates a delay of 1 year due to Covid 19 restrictions.

Presently, also follow ups and risk assessments are outstanding throughout the country.

#### Drinking water at Nuuk

In 2021, algae growth was documented in the water reservoir something not previously found. This is likely due to higher temperatures and has had a negative but harmless impact on the taste and odour of the water. To ensure that this does not happen again in the future, Nukissiorfiit has been working on a bypass solution, which has been put out to tender and will be implemented at the beginning of summer 2022. This solution will only be used as an emergency supply in the event of another algae bloom in the reservoir.

#### **Minimisation of Supply by Tank Cars**

During recent years, Nukissiorfiit has surveyed the potential for pressurized water in locations with tank car supply with a view to reducing the number of cars, as transport by car is very costly hing pressurised water and the associated financial costs.

Nukissiorfiit's estimate for the riddance of the water tank cars in operation amounts a total of around 500 million DKK. This is out of proportion compared to what the community and the citizens get in return. However, it does represent a financial gain to minimize the use of tank cars in some locations. Nukissiorfiit has therefore developed a strategy for minimising water transport, and has focused on Qagortog, Nanortalik (Alluitsup Paa) and Sisimiut so far.

Nukissiorfiit's customers will be given the option to pay off the installation of a pipeline by instalments equalling the amount they pay for the tank car supply.



#### Heating Supply

Nukissiorfiit supplies 16 towns and settlements with heating and has a total of 23 heating plants. Heating is supplied in the form of district heating or electrical heating from surplus production or from hydropower or residual heat from diesel powered plants. Public supply takes place as follows:

District heating is waterborne and produced as residual heat from diesel plants and recidual capacity from hydroelectrical plants. Where Nukissiorfiit supplies district heating back-up oil boilers are found and used if production ceases. Some towns are supplied with district heating in the form of residual heat from municipal waste incineration plants.

Fixed electrical heating is offered in some buildings at Nuuk made possible by the former surplus production from the hydroelectric plant at Buksefjorden/Utoggarmiut Kangerluarsunnguat. At the time of establishment, an electrical backup structure existed which is necessary to offer this product. Fixed electrical heating is no longer offered.

In some locations Nukissiorfiit offers interruptible heating in the form of electrical or district heating. Interruptible heating is supplied from Nukissiorfiit's surplus capacity and stopped when there is no longer surplus production. As opposed to fixed heating supply, the customer is responsible for backup supply in the form of an oil-fired burner.

At the six hydropower towns Nukissiorfiit offers interruptible electric heating. Interruptible heating functions by installation of an electric cartridge or electric boiler parallel to the oil burner. The oil burner is heated by electricity from the hydroelectric plant. This way, the heating comes from hydropower – and not fossil fuel. If the electricity production stops, the original oil-fired burner is used as backup.

#### **Reduction of Heating Costs**

In May, 2021, Naalakkersuisut decided to lower the price of diesel from 5.35 to 4.55 DKK per litre.

This caused a reduction of production costs for diesel-based electricity and heating which in turn caused Nukissiorfiit to suffer loss on sale of heating products which is determined politically and follows with the price of diesel. The price structures mean that the public heating price is not based on Nukissiorfiit's costs but based, to a great extent, on the price of diesel. The purpose is to secure that customers with public heating supply pay equal to customers with private oil burners. However, the majority of Nukissiorfiit's heating is produced with electric boilers that are fuelled by energy from hydropower and not dependent on the price of diesel.

Although the price reduction resulted in lower costs of diesel-based heating it also entailed a loss for Nukissiorfiit as possible income from heating sale has been reduced. Soon after the price reduction, Nukissiorfiit saw customers with interruptible heating supply wanting to terminate their contracts to go back to diesel-based heating. To stop this conversion and minimize Nukissiorfiit's loss. Naalakkersuisut lowered the price of fixed and interruptible heating in September, 2021.

#### **Utilization of Waste Heat**

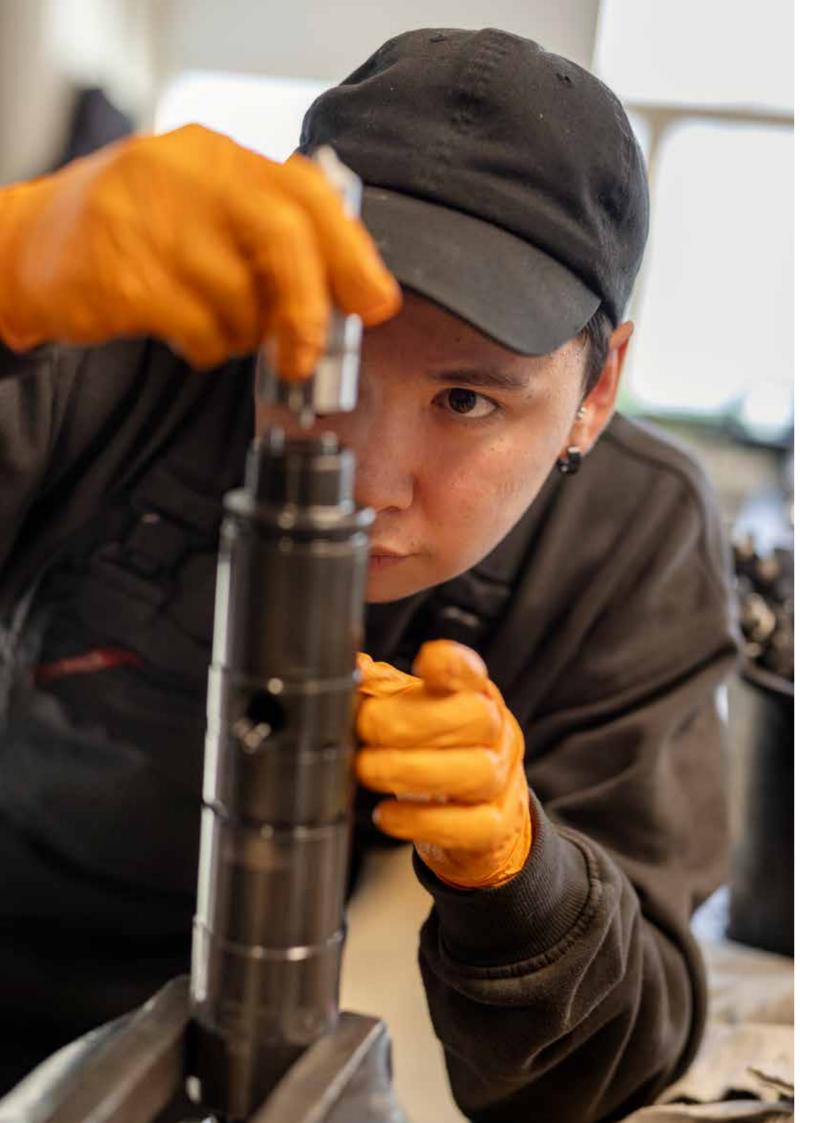
In 2021. Nukissiorfiit received 23 GWh from national waste incineration. Where Nukissiorfiit receives energy from waste incineration plants the waste heating replaces diesel-based heating for the benefit of climate and socio-economy.

In 2020, Nukissiorfiit entered into a cooperation agreement with the joint municipal waste company of ESANI a/s to purchase energy from their future waste incineration plants at Sisimiut and Nuuk. The waste energy is to be used in the district heating supply of the two towns with a view to optimum utilization of the waste heat.

The first plant, based at Sisimiut, was supposed to be completed in the autumn of 2022, whilst the plant at Nuuk was expected finished in 2023. ESANI a/s, however, has informed that the constructions are delayed and the order changed so that the Nuuk plant is now expected to be complete in 2023 and the Sisimiut plant in 2024.

The waste incineration plants will hold a capacity of each 20,000 tonnes waste annually and produce up to an annual 57.6 GWh





### **Expectations for 2022**

Nukissiorfiit's efforts to realise Naalakkersuisut's goal regarding renewable energy wherever possible continue in the years to come. This means that focus on the distribution of renewable energy and modernisation of Nukissiorfiit's plants are ever more central.

#### Financial Management Audit

In 2021, Nukissiorfiit prepared a statement of its financial situation. The statement shows that Nukissiorfiit's earning capacity does not generate sufficient liquidity to reinvest and invest in security of supply and renewable energy where needed.

Based on the statement the former department of the environment and the Department of Finances have requested that Deloitte carries out a financial management audit.

Nukissiorfiit has estimated yearly reinvestments and new investments at 250-350 million DKK to reach a sustainable level. This presents an increased need for liquidity at 100-200 million DKK. The financial management auditors consider these financial analyses to be thorough and well documented.

In 2022, the following key points must be clarified:

- Adjustment of Nukissiorfiit's earnings
- Improvement of Nukissiorfiit's operations by focusing on the core business
- Alternative management patterns for a net managed business model

### Strategy for supply security and new facility for the emergency power plant in Nuuk

In 2021, a major effort has been launched to analyse an updated need and strategy for the country's security of supply.

In recent years, security of supply has been under increasing pressure due to Nukissiorfiit's finances. Nukissiorfiit's gradually deteriorating financial situation has made the necessary maintenance work and reinvestments more difficult. Especially in 2021, Nukissiorfiit has experienced many outages and problems with both water and electricity supply due to lacking re-investments and new investments in equipment and technology.

### Distribution of Interruptible Electrical Heating at Ilulissat and at Nuuk

The future expansion of the hydroelectric plant at Buksefjorden offers the customers possible conversion from diesel-based heating to interruptible electrified heating by installation of an electric boiler to the oil-based boiler already in operation. This means that in the future customers who are currently heating their homes with diesel will be able to heat their homes with electricity from the hydropower plant. This will reduce the use of fossil fuel and lower CO<sup>2</sup> emission. Nukissiorfiit has set up a working group to handle the task of converting customers from diesel-based heating to interruptible electric heating, and the conversion is expected to start in 2022.

### **Finances**

#### **REMARKS TO THE ANNUAL ACCOUNTS 2021**

#### Turnover

Nukissiorfiit's primary turnover is determined by the sale of electricity, water and heating mearued in quantities multiplied by product prices.

Nukissiorfiit's secondary turnover comprises mainly payments from service contracts established in connection with the single price reform along with fees and other services, including installation and contracting companies at Qaanaag and Ittoggortoormiit.

#### Costs

Nukissiorfiit's costs can be divided into 5 main categories:

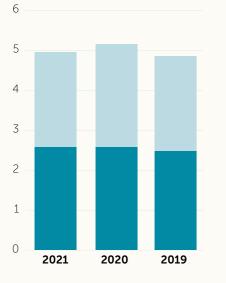
- 1. Cost of sales at 184.9 million DKK (20%) largely diesel oil
- 2. Cost of labour at 193.8 million DKK (20.9%)
- 3. Other capacity costs at 179.2 million DKK (19.4%)
- 4. Depreciation at 292.6 million DKK (31.6%) a) of which 135.3 million DKK is ordinary depreciation b) of which 157.3 million DKK is depreciation.
- 5. Interest on Landskassen (Greenland Treasury) loans at 75.1 million DKK (8.2%)

Heating

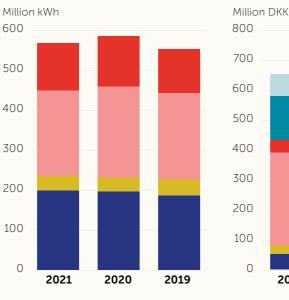
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Turnover per product

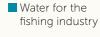








Water for ordinary consumers





Electrical heating District heating Electricity for the Electricity and fishing industry power for ordinary consumers

2019

2020

2021

Although hydropower is the primary source of energy, Nukissiorfiit continues to use diesel oil in many locations. As a result, diesel oil is still a major cost to Nukissiorfiit. As Nukissiorfiit's production to a larger extent is based on renewable energy the consumption of diesel oil is expected to decrease.

Nukissiorfiit employs new personnel according to currently applicable agreements. The development of personnel costs fluctuates with the number of personnel and salary costs determined by the Government and the trade unions.

Depreciation reflects capital investments through the years. A major part pertains to hydropower plants. On long-term loans prior to 2016 interest is paid to Landskassen at 6%, whereas 3% interest is paid on new loans. Interest on loans which originally accrued 6% will be gradually lowered to 3%. This is achieved through decreasing the annual interest by 0.22%.

#### **Balance Sheet**

The value of Nukissiorfiits' assets amounts to 2.9 billion DKK and consists mainly of production and distribution facilities followed by inventories, accounts receivables and cash equivalents. Nukissiorfiit's equity is 1.46 billion DKK. Long- and short-term debt to Landskassen amounts to 1.62 billion DKK. The foreign funding consists of salaries/wages due and debt to suppliers - a total of 85 million DKK.

#### **Events after the Balance Sheet**

After the balance sheet date, 31st December, 2021, Nukissiorfiit has become aware that the fishing industry tariffs for the period 2018-2021 have not been adjusted in accordance with the Finance Acts for the same period. This may mean a supplementary adjustment to the fishing industry and thus a risk of an extraordinary liquidity loss in 2022.

Figure 7 Sale and turnover in 2021, 2021 and 2019, divided between water and energy

#### Investments

Every year, Nukissiorfiit implements a series of projects which can be divided into four main categories:

- Re-investments
- New installations/modernisation
- Renewable energy
- Water guality

In 2021 investments totalled DKK 133.8 million. This represents an increase of DKK 20.8 million in comparison to 2020. In 2021, approx. DKK 33 million were re-invested in settlements, corresponding to almost 25% of the total investments.

	Investments 2015 2021					
Asset category	2021	2020	2019			
DKK MILLION						
Re-investment	94	38	61			
New installation/	32	52	80			
modernisation	5	13	3			
Renewable energy	3	9	47			
Water quality	133,8	113	192			
Total investment						

Investments 2019-2021

The level of investment has generally been decreasing throughout the period. At the outset of the year, investments were planned in the amount of DKK 160-180 million, representing a decrease of DKK 12-32 million compared to 2020. The reason for the lower investment volume is that Nukissiorfiit's liquidity is insufficient to bear a higher volume. However, the need for re-investments particularly, is great, as postponement of necessary investments in the supply infrastructure increases the risk of breakdowns.

### **Stakeholders**

#### Customers

Nationally, Nukissiorfiit has 20,000 customers, of which 20,000 buy electricity, 8,700 buy water, and 4,100 buy heating. Roughly 8,100 customers pay via BetalingsService (Payment service).

In recent years, Nukissiorfiit's total customer accounts receivable and loss at the end of the year have developed as follows:

#### Outstanding and losses in DKK million

	2021	2020	2019
Accounts receivables (debtors) <sup>1</sup>	123,6	140,5	130,1
Realised losses on receivables	1,8	3,0	0,5

<sup>1</sup> Loss is typically accumulated when businesses go bankrupt, customers die or move out of the country.

#### Personnel

Nukissiorfiit has 416 personnel, calculated as full-time personnel. This is a decrease compared to 2020 with 437 personnel.

#### Suppliers

In 2021, Nukissiorfiit's total purchases amounted DKK 465 million against, 469 DKK million in 2020. 70% was purchased from local suppliers (including purchase of gas oil). Nukkissiorfiit's objective in 2021 is larger purchase volume from fewer suppliers to obtain more favourable prices. In 2021, gas oil purchases accounted for 35% of total purchases, corresponding to DKK 165 million

#### Ownership

Nukissiorfiit is a net managed company under the Ministry of Industry, Energy and Research. Nukissiorfiit is ultimately owned by society and consumers.

The 1997 Regulation of the Greenlandic Parliament on energy supply and the 2007 equivalent on water supply set the framework for Nukissiorfiit's business as primary supplier of electricity, water and heating in Greenland. Within this framework, taking account of socioeconomic conditions, Nukissiorfiit is obliged to focus on steady supply and increased use of renewable energy and customer-efficient solutions. Nukissiorfiit's prices and terms of delivery are approved by the Naalakkersuisut.



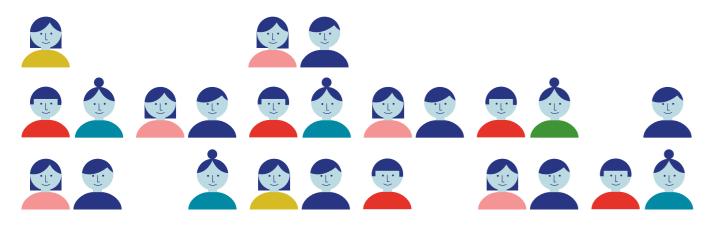
#### Security of Supply

For society to function as we know it is essential that Nukissiorfiit maintains high security of supply. Therefore, Nukissiorfiit ongoingly aims at securing the supply and improving the infrastructure. This happens through increased monitoring, improved management, modernisation, redundancy of the distribution network and storage of critical components.

Nukissiorfiit has back-up plants and spare capacity at all towns and settlements which are applied if the ordinary supply fails. Further, Nukissiorfiit has mobile emergency plants which can be sailed or flown into any given town or settlement, experiencing supply failure. Nukissiorfiit continuously prepares and updates its contingency plans for various emergencies that may arise in order to secure the supply of electricity, water and heat.

#### Personnel

It is a challenge to maintain and attract well educated personnel at public salary. Nukissiorfiit strives hard to secure good working conditions to achieve this. This means keeping a sharp focus on the balance between private life and work life, flexible working hours, senior arrangements and exercise at work. Exercise during working hours is made possible for two hours every week and matters to personnel health as well as unity.



#### Price of Oil and Currency

Nukissiorfiit purchases diesel oil in DKK and price fluctuations in oil prices therefore causes Nukissiorfiit's costs to vary with the prices. Further, there is a natural connection with Nukissiorfiit's pricing. The latter is decided politically and time delays may therefore occur and also some deviations from the mentioned principle.

#### **Selling Prices**

Nukissiorfiit's prices and terms of sale and delivery are approved by Naalakkersuisut on the basis of Nukissiorfiit's proposal. Thus, to some extent the prices reflect political choices rather than the directly underlying production costs.

Based on Naalakkersuisut's objectives the former members of Naalakkersiusut decided to introduce national pricing on electricity, water and heating as of 1st January, 2018, so that all customers pay equal prices for Nukissiorfiit's products. The land-based fishing industry, however, pays down to 50% of the local unity cost, up to maximum of DKK/kWh 1.65 electricity and DKK/m<sup>3</sup> water 20.00 which are the regular prices for these products, and a minimum of 50% of consumer prices. This means that prices may be lower at big towns whereas prices at settlements and small towns are the same for private consumers and the fishing industry.

Pricing of Nukissiorfiit's products is below production costs at most towns and settlements. In 2021, the average weighted production price for one kWh was DKK 2.11, but it was sold to the consumer at DKK/kWh 1.65. The average weighted price for one m<sup>3</sup> water was DKK 28.79 and was sold at a consumer price of DKK/m<sup>3</sup> 20. Production costs are generally higher in the small settlements and towns that are supplied with diesel. Lowest production costs are found at towns with hydropower. An overview of Nukissiorfiit's production costs for each location is included in the distribution account, Appendix 2.

#### Suppliers

In a Greenlandic context Nukissiorfiit is a big company, but in relation to several foreign suppliers a financially less important customer. Practically, this means that Nukissiorfiit is not always capable of obtaining equally favourable terms of delivery and price as are significantly larger companies. In addition, Nukissiorfiit could face dependency on business partners that are experienced in arctic conditions. Similarly, the range of suppliers is limited in several communities, which may cause Nukissiorfiit's e.g. construction work to become more expensive. Generally, Nukissiorfiit aims at playing a more prominent role with fewer qualified suppliers and at supporting the development of a local, competent and competitive group of suppliers. Long delivery times necessitate a stock of critical components, and several locations in the country are only navigated for limited periods. This places extra high demands on planning, managing and following up on the flow of goods for both spare parts and construction projects.

#### **Interest Rate Risk**

All of Nukissiorfiit's loan agreements are with Naalakkersuisut. Presently, there is no risk of market interest rates impacting on the loans. On long-term loans, dated before 2016, 6% interest is paid to Landskassen, whereas new loans accrue 3% interest. 6% loans will be gradually lowered to 3% by annual decrease of 0.22%. Therefore, interest costs are expected to be gradually reduced and no present loans accrue interest at 6%.

#### **IT Security**

The risk of hacking of utility suppliers and other critically important infrastructure is in focus all over the world. To avoid cyber-attacks impacting energy and water supply, Nukissiorfiit continues to focus on IT security.

March 2021 saw an incident with a fraudulent bank transfer made by a person who, professionally, avoided Nukissiorfiit's approval processes. In consequence, Nukissiorfiit has tightened the procedure for approving vouchers and also implemented additional security systems.



# SOCIAL RESPONSIBILITY

Nukissiorfiit makes sure that all towns and settlements in the country have lighting and energy as well as water. The obligation to supply is crucial to societal development and public health. Therefore, every year a report on Nukissiorfiit's social responsibility, known as Corporate Social Responsibility (CSR), is UN's Global Compact Nukissiorfiit is obliged to ongoing imincluded in the annual report and accounts, compare §99a of the Danish Annual accounts Act.

#### Siukkaq – Nukissiorfiit's New Policy for Social Responsibility

Nukkissiorfiit must contribute to the building of a sustainable society through sustainable supply of water, electricity and heating and efforts to secure support of the transition to sustainability in more than one sense. Nukissiorfiit's policy must provide the framework for CSR and a common starting point for the work with sustainability to make sure that the company works according to the same principles.

The policy places Nukissiorfiit as a decisive operator in the transition to sustainability and focuses on the responsibility Nukissiorfiit takes - and will continue to take - in the community. It expresses Nukissiorfiit's ambitions to create growth and surplus in the community through transition from imported fossil fuel to supply and surplus of renewable energy.

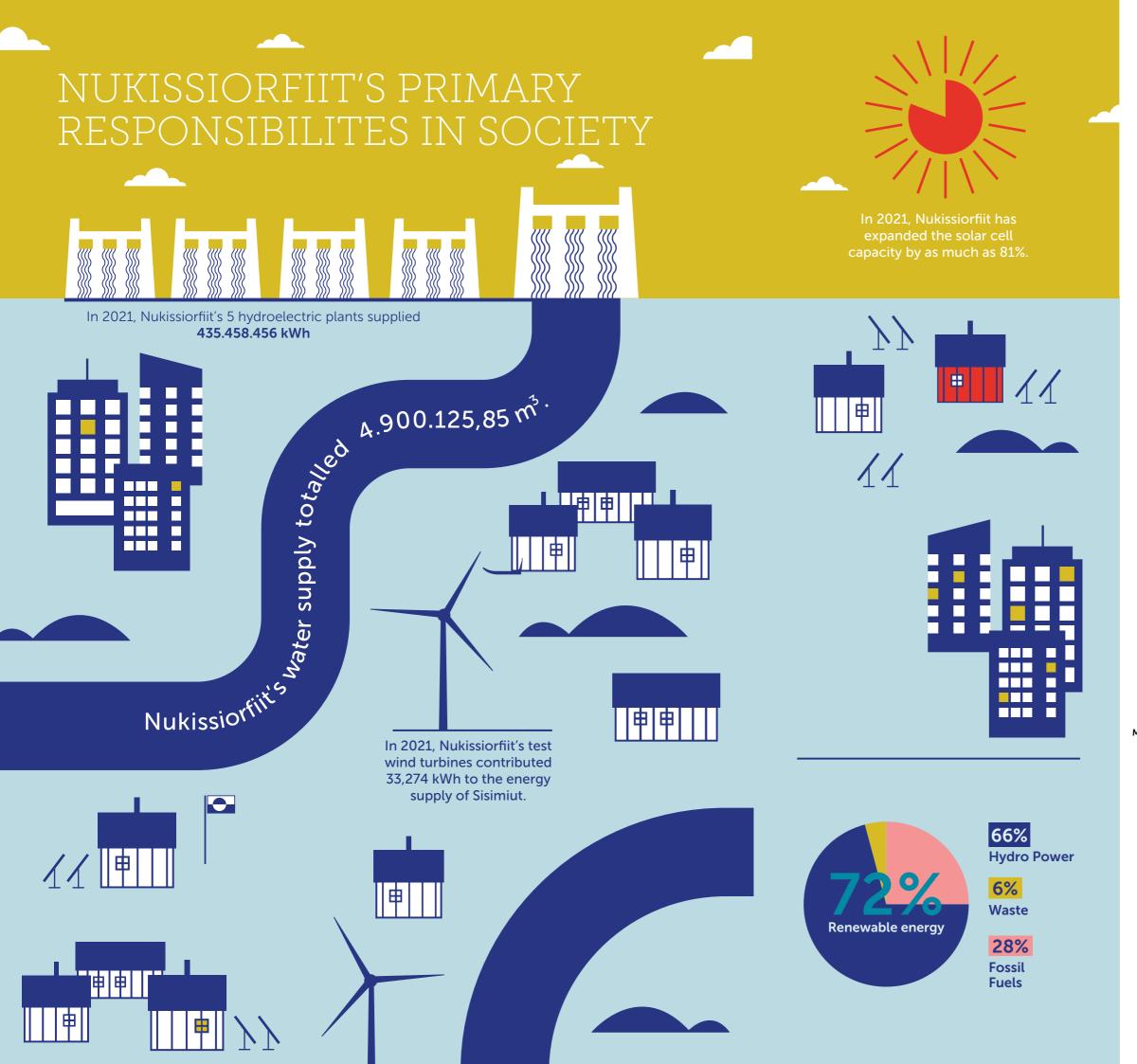
UN's 17 global goals are corner stones of Nukissiorfiit's CSR policy and set the framework for Nukissiorfiit's work with sustainability, while the ten principles of UN's Global Compact secure a common ethical foundation for the whole company. Under provement and reporting on the fulfilment of the ten principles, including human rights, labour rights, environment and anti-corruption. These principles reflect Nukissiorfiit's minimum requirement for all interactions, internally as well as externally.

#### Nukissiorfiit's Definition of Sustainability

Nukissiorfiit's definition of sustainablity is to be viewed from a holistic perspective. Thus, endeavours in the fields of society, finances and environment are connected and inter-dependent but they should still be considered as independent key areas of Nukissiorfiit's CSR. These three key areas aid Nukissiorfiit in creating value in society and for stakeholders.









#### **UN's Global Compact**

We are pleased to inform you that Nukissiorfiit as of September, 2021, forms part of UN's Global Compact and Global Compact Network Denmark.

### UN's Global Goals for Sustainable Development

UN's 17 global goals for sustainable development is to create better living conditions for the world population and secure the future of the planet.

UN's 17 global goals are of crucial importance to Nukissiorfiit's work on green transition. The goals form a common foundation for Nukissiorfiit's work towards societal sustainability and for partnership agreements.

Nukissiorfiit performs targeted at the global goals and in the following order of priority:





#### SDG 6 Clean Water and Sanitation

Nukissiorfiit produces drinking water for the country in three different ways:

- 1. Extraction from lakes and rivers: fresh water used for producing drinking water
- 2. Desalination of seawater: for lack of alternatives. desalinated seawater is used at some settlements to make pure drinking water.
- 3. Melting of ice floes: During winter, Nukissiorfiit produces drinking water from melted glacier ice for Qaanaaq.

#### In 2021, Nukissiorfiit's water supply amounted 4,900,125.85 m<sup>3</sup>

Every day, Nukissiorfiit strives to secure pure drinking water for our consumers. The development in these endeavours can be seen from the number of boiling injunction days in the country.

#### Number of boiling injunctions days in Greenland

In 2021, Nukissiorfiit had 875 boiling injunction days on a national basis.

Som følge af Selvstyrets bekendtgørelse nr. 63 af 4. november 2021 om vandkvalitet og tilsyn med vandforsyningsanlæg, har tagelse af mikrobiologiske analyser, hvilket forventes at give et mere smidigt arbejdsflow ved udtagning og fremsendelse. Processen bliver nemmere, da Nukissiorfiit kan planlægge og udføre udtagning egenhændigt. Nukissiorfiit forventer derfor, at kogeanbefalinger fremadrettet kan ophæves hurtigere efter udbedring, da vandprøvetagning kan udføres og behandles hurtigere end hidtil.

In consequence of Nalakkersuisut's proclamation No. 63 of 4th November, 2021, concerning water quality and supervision of water supply systems Nukissiorfiit took over the responsibility for sampling of microbiological analyses which is expected to entail a smoother work flow. The process is made easier because Nukissiorfiit can plan and take samples singlehandedly. Nukissiorfiit therefore expects that water boiling recommendations can be lifted more quickly, as water sampling can be carried out and processed faster than before.

As indicated in the graph showing boiling injunction days, the development from 2014 to 2019 has been decreasing. From 2019 to 2021, this development has been increasing which is greatly due to an increasing need for renovation and replacement of several water plants in the country.

#### Documented Drinking Water Security (DDS)

Nukissiorfiit has always endeavoured to secure clean water for Greenland. The introduction of the DDS project in 2018 entailed extraordinary focus on this matter and since then all towns in the country have implemented DDS. The work continues in 2021 seeing several settlements implementing DDS. As a consequence of Covid 19 restrictions in many parts of the country the planned rollout of DDS at the settlements has been limited.

During 2021, the settlements stated below have implemented DDS in four of Nukissiorfiit's six districts:

#### District Disko

Attu, Iginniarfik, Niagornaarsuk, Ikerasaarsuk, Akunnaag, Kitsissuarsuit og Ikamiut

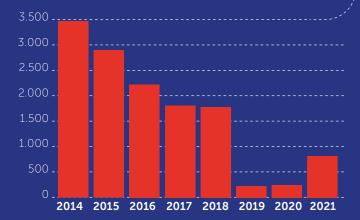
#### District Ilulissat

In the course of 2022, Nukissiorfiit expects to advance the im-Ilimanag plementation of DDS at the country's settlements. This has District Kujalleq been entered into Nukissiorfiit's strategy which aims at DDS Ammassivik, Alluitsup Paa, Tasiusaq, Igaliku, Qassiarsuk, Saarlog being implemented at all water plants by 2025. Nukissiorfiit og Egalugaarsuit expects to further secure the water supply by establishing five new town waterworks. This will require financial means - a District Avannaa general parameter for Nukissiorfiit to maintain a satisfactory Qaarsut, Ikerasak, Saattut, Ukkusissat standard of drinking water for all consumers.

Some settlements are well under way implementing the DDS guidelines and processes while others are at the early stages.



#### Days with Boiling injunction



#### Water Plants at Settlements

Nukissiorfiit finds it necessary to focus on modernisation of water plants at both towns and settlements in order to supply clean water for all of our consumers.

During 2021, two new standard water plants were completed, viz. one at Itilleg near Sisimiut and the other at Ikerasak near Uummannaq. Both plants were dilapidated and gave rise to breakdowns or poor quality of drinking water.

Nukissiorfiit's goal is to establish up to five standard plants at settlements annually. In recent years, this goal has been hard to achieve due to insufficient finances for this area.

#### **Expectations for the Water Supply in 2022**

#### SDG 7 Affordable and Clean Energy

Nukissiorfiit aims at supplying all towns and settlements in Greenland with sustainable energy. In 2021, 70% of the supply consists of renewable energy, the majority by far from hydropower.

#### **Hydroelectric Plants**

#### - the country's main source of energy

Following approval of the legislative proposal for expansion of the hydroelectric plant at Nuuk, and also a new hydroelectric plant at Qasigannguit and Aasiat, Nukissiorfiit's share of renewable energy is expected to increase from 70% to 90%. These investments are expected to decrease Nukissiorfiit's yearly emission of CO<sup>2</sup> by 114,000 tonnes as of 2030 onwards.

### In 2021, Nukissiorfiit's 5 hydroelectric plants supplied 435 million kWh.



Hydropower Nuuk, Tasiilaq, Narsaq, Qaqortoq, Sisimiut og Ilulissat

#### **Micro Hydroelectric Plants**

In line with Nukissiorfiit's strategic goal to strengthen the green transition, suitable sustainable solutions for small settlements are sought. One option is using our knowledge of hydropower for micro hydropower as well. In 2021, Nukissiorfiit continued the required preliminary studies at Kulusuk and Narsarmijit, uncovering suitable solutions, installation of gauging equipment and preliminary geotechnical studies of the subsurface. Nukissiorfiit expects these sustainable solutions to be realised by 2025.

#### Expectations in 2022 - Hydro Power

In 2022, Nukissiorfiit expects to continue the hydrological preliminary studies at Maniitsoq and Paamiut. Data collection from these locations will impact future decisions on hydroelectric plants at Maniitsoq and Paamiut. The possibilities of expansion of the hydropower potential in the South of Greenland and at Tasiilaq are also investigated.



**Solar Cells** Nuuk, Uummannaq, Atammik, Kangerluk, Saqqaq og Qeqertaq

#### Solar Cell Installation

Again in 2021, Nukissiorfiit has expanded the capacity of solar cells and established these, as follows:

Qeqertaq, 48,75 kwp Ittoqqortoormiit, 58,5 kwp Eqalugaarsuit, 60 kwp Qeqertarsuatsiaat, 97,5 kwp

Thereby, Nukissiorfiit expanded the capacity of solar cells by as much as 81% in 2021.

#### Nukissiorfiit's Solar Plants in Greenland

Ammassivik Eqalugaarsuit Igaliku Qeqertarsuatsia Nuuk Atammik Ikerasaarsuk Qeqertaq Saqqaq Kangerluk Uummannaq Ittoqqortoormiit



#### Wind Power

In the autumn of 2018, Nukissiorfiit established two test wind turbines near Sisimiut. These turbines have given us valuable knowledge of which type of turbine is best suited for the Greenlandic climate. Both turbines have produced power at a peak load of nearly 40 kW which effect could save Nukissiorfiit the use of an annual 13,000 litres of diesel. In 2021, Nukissiorfiit's test wind turbines have contributed 33,274 kWh to the energy supply at Sisimiut. Based on this knowledge, Nukissiorfiit expects to install a third smaller 6 kW wind turbine at either Ammassivik or Eqalugaarsuit in the spring of 2022. It is also expected that crucial studies will be carried out in order to install a larger 15 kW wind turbine in South Greenland.

#### SDG 13 Climate Action

Nukissiorfiit aims at supplying all towns and settlements in Greenland with sustainable energy. In 2021, 70% of the supply consists of renewable energy, the majority by far from hydropower.

Nukissiorfiit's supply of the towns and settlements is marked by the stand-alone status of each town. This means that they are individually supplied with

	Ϋ́	*** <b>111111</b>
	Electricity CO <sub>2</sub> emission	Heating CO, emission
	kg per kWh produced	kg per kWh produced
Nanortalik	0,8578	produced
Aappilattog	1,3433	
Narsarmijit	0,9934	
Tasiusag	0.7485	
Ammassivik	0,9557	
Alluitsup Paa	1,1597	
Qagortog	0,0830	0,1790
Saarloq	1,1222	
Eqalugaarsuit	0,9223	
Qassimiut	0,8715	
Narsaq	0,0520	
Igaliku	0,2859	
Qassiarsuk	0,5245	
Paamiut	0,7989	0,1877
Arsuk	0,9943	
Nuuk	0,0070	0,0148
Qeqertarsuatsiaat	0,6712	
Kapisillit	0,5797	
Maniitsoq	0,7646	0,1667
Atammik	0,7878	
Napasoq	0,7488	
Kangaamiut	0,8053	
Sisimiut	0,0117	0,1119
Itilleq	1,5281	
Sarfannguit	0,7881	
Tasiilaq	0,0516	
Sermiligaaq	0,7220	
lsortoq	1,3646	
Kulusuk	0,6111	
Tiniteqilaaq	0,7249	
Kuummiut	0,7832	
Ittoqqortoormiit	0,9535	



Nukissiorfiit's hydroelectrical plants have saved 172,000 tonnes of CO<sup>2</sup>, equalling 1,600 Atlantic trips by Norsaq.

individual sources of energy. It also means that the  $CO^2$  emission from the individual towns and settlements varies considerably. The hydro powered towns in particular have very low  $CO^2$  emission per kWh. Diesel powered towns have higher  $CO^2$  emission. The below table enables estimation of Nukissiorfiit's share of the total emission of  $CO^2$ .

	Ϋ́	222 1
Continued	Electricity CO <sub>2</sub> emission kg per kWh produced	Heating CO <sub>2</sub> emission kg per kWh produced
Kangaatsiaq	0,7056	
Attu	0,8957	
lginniarfik	1,2533	
Niaqornaarsuk	0,8768	
Ikerasaarsuk	2,0545	
Aasiaat	0,8088	0,2349
Akunnaaq	0,6736	
Kitsissuarsuit	1,2491	
Qasigiannguit	0,7858	0,1483
Ikamiut	0,9812	
Qeqertarsuaq	0,8401	
Kangerluk	1,3069	
Ilulissat	0,0041	0,0038
Oqaatsut	1,7658	
Qeqertaq	0,8724	
Saqqaq	0,9749	
Ilimanaq	0,9344	
Uummannaq	0,8095	
Niaqornat	1,1860	
Qaarsut	1,0602	
Ikerasak	0,7919	
Saattut	0,9745	
Ukkusissat	0,7068	
Upernavik	0,8243	
Upernavik Kujalleq	0,9875	
Kangersuatsiaq	1,6029	
Aappilattoq	0,5548	
Nutaarmiut	1,5514	
Tasiusaq	0,8326	
Nuussuaq	1,4076	0,2266
Kullorsuaq	0,8668	
Naajaat	0,3634	
Innaarsuit	0,8323	
Qaanaaq	0,8953	0,107
Savissivik	1,5725	
Siorapaluk	0,6717	

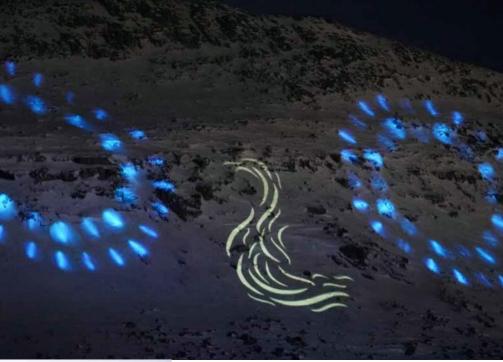


#### SDG 17 Partnerships to Achieve the Goals

#### Light Show on Ukkusissat

Due to Covid 19 the culture night 2021 was cancelled. A series of large companies at Nuuk – Royal Arctic Line, Air Greenland, TUSASS, Nukissiorfiit and Mittarfegarfiit - joined forces to mark the popular week in the shape of a big light show on Ukkusissat. The show was created in co-operation with Mr. Naleraq Eugenius, who is a theatre technician.

"United, we lift the infrastructure in different ways. By power, air, water, communication, logistics and close co-operation. During this special time, it is important that we abide by the authorities' recommendations on social distancing and therefore we wish to present you with a light show to be enjoyed by everyone at a distance".





In 2021, Nukissiorfiit entered into a partnership with Kommunegarfik Sermersoog (Sermersoog Municipality) to secure a more sustainable society and to better utilise the green energy from the hydroelectrical plant at Utoqqarmiut Kangerluarsunnguat. Through the concept of Nukissarlik, Nukissiorfiit strives to establish a charging network making electrical cars more attractive in Greenland. To secure an efficient and sustainable rollout of the charging network, the partnership with Kommuneqarfik Sermersooq has been crucial. In addition to the five charging stations at Nuuk, Nukissiorfiit has mounted 35 charging stations distributed at the hydropower towns of Qagortog, Nuuk, Iluissat and Sisimiut in 2021. Nationwide, Nukissalik has 492 active customers and the next step is expanding the charging network to all hydropower towns in 2022.

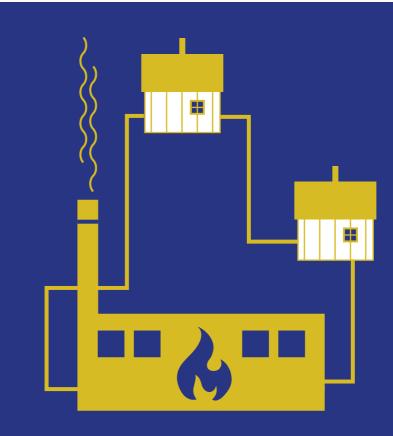
### MEEQQAT PISINNAATITAAFFII

T PEQATIGIIT MEEDQAP PISINNAATITAAFFII PILL AQATIGIISSUTAAT



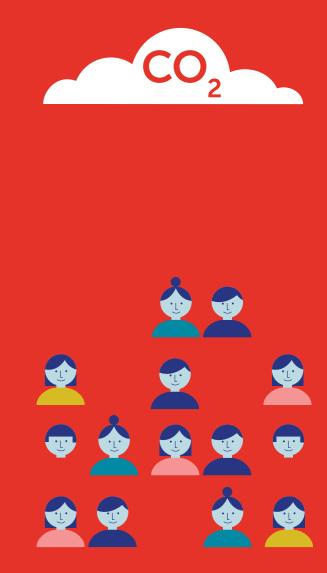
#### Silasisa - National Climate Week for Elementary School Classes

The climate is changing worldwide and the changes are particularly felt in Greenland. Future generations will take over a world in which consciousness of the consequences of CO<sup>2</sup> emission are more important than ever before. For this reason, Nukissiorfiit entered into a partnership with UNICEF, Greenland, Naturinstituttet, teachers and teachers training college. The cooperation resulted in a climate week for 8th to 10th grade elementary school classes all over the country. During the climate week the children were educated in the consequences of rising temperatures in the Arctic and how sustainable solutions, such as hydroelectric plants, can reduce CO<sup>2</sup> emission. The climate week is expected to be repeated in 2022 and Nukissiofiit will again contribute with knowledge about sustainable solutions for the benefit of society.









# ESAN

#### Better Utilisation of Waste Heat

In 2021, Nukissiorfiit entered into a partnership with the joint municipal waste company of ESANI a/s to achieve a better utilization of waste in Greenland. This partnership paves the way for waste energy being centralised in modern incineration plants at Nuuk and Sisimiut in 2023 and 2024. Coastal waste will be shipped to the two towns and utilised to bring down the consumption of fossil fuel. The new and modern incineration plants will have a capacity of 60 tonnes waste a day.

#### Our work for the Good Workplace

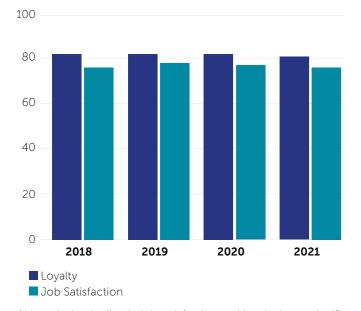
Nukissiorfiit focuses on creating the best framework for employees and the HR department works continuously on increasing job satisfaction. Nukissiorfiit conducts an annual job satisfaction survey (MTU) to monitor job satisfaction and target intervention areas. Thriving and happy employees are of great value to any company. Job satisfaction enhances the engagement and increases production.

#### MTU (Job Satisfaction Survey) 2021

In recent years, job satisfaction in Nukissiorfiit has been very high but satisfaction and loyalty have been decreasing. The graph below shows the overall segmentation of the job satisfaction survey during the past 4 years.

#### Figure 9

Development in Job Satisfaction and Loyalty in Nukissiorfiit, 2018-2021



Although the decline in job satisfaction and loyalty is not significant, it naturally engages the management of Nukissiorfiit. In consequence, focus is now added to the plans of action for 2022. The organisational leaders must secure that the employees have involvement and influence on the mapping of concrete efforts and actions.

The job satisfaction survey (MTU) in 2021 proved the cooperation in Nukissiorfiit to be a force. The employees highly value the cooperation and find it very important. The board of directors of Nukissiorfiit has attached great importance to organisational cohesion – across districts, occupational categories and problem solving.

Focus on internal intermediation and communication is expected to intensify and, hopefully, improve through a series of measures in the spring of 2022, one of which is communication strategy.

#### Management Development in Nukissiorfiit

Competence development is generally an area of focus for Nukissiofiit. Management development is on the agenda and special development processes for district managers and heads of departments were completed in 2019 and 2020, respectively.

In 2021, Nukissiorfiit completed the first of a total of three development processes for the 45 coastal team leaders. The first module, Personnel Management, stresses rules and frames for good and appropriate personnel management. The development process is followed up by module 2, Efficient Daily Management, and module 3, Strategic Management, which are planned in the autumn of 2022, and the spring of 2023, respectively.

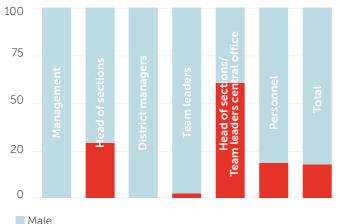
The development programme has been prepared by HR in close cooperation with the district managers and the board of directors. The programme will eventually be offered to heads of departments/team leaders at the head office, in a customised version.

#### Equality in Nukissiorfiit

Nukissiorfiit has a policy for equality. Females and males are treated equally, at both internal and external recruitment, determination of wage/salary and subsequent personnel development. Nukissiorfiit recommends that job advertisements encourage both genders, all ages, different ethnicities to apply for vacancies of relevance. Nukissiorfiit wants its employees to reflect the surrounding society and to promote diversity.





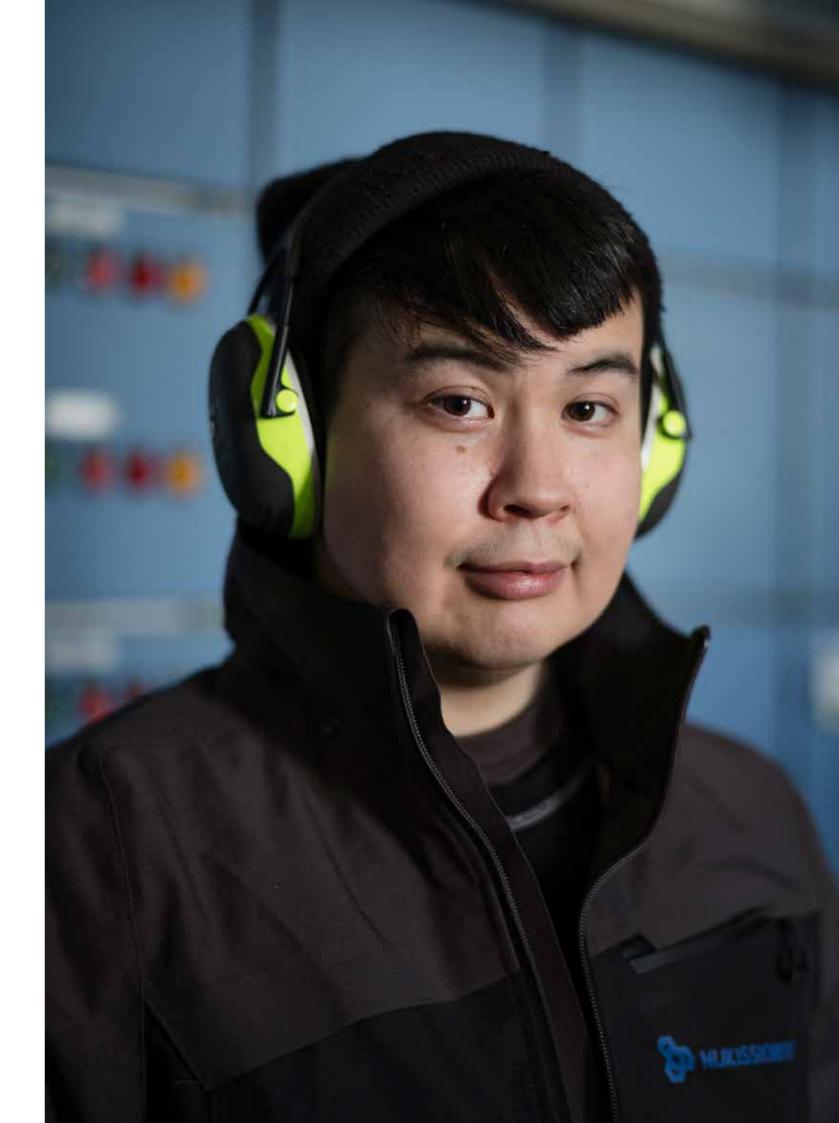


Female

### Special Commitment Regarding Sick Days in Nukissiorfiit

In December, 2020, Nukissiorfiit's board of dirctors decided to follow HR's recommendations of a strengthened commitment regarding sick days. In December, 2020, the sick days amounted to 4.2%. In June, 2021, the strengthened commitment led to a decrease to 3.6% nationally. In the period 1st January, 2021, until the present day, Nukissiorfiit has initiated several measures to bring down sick days and has achieved some success.

The goal is for the overall sickness absence for the organisation to reach 3.0% within a period of 2-3 years.



# ANNUAL REPORT AND ACCOUNTS

Nukissiorfiit's result in 2021 was -138.3 million DKK against -152.9 million DKK in 2020.

Result before interest and depreciation (earnings contribution) amounted to 229.9 million DKK which represents a decrease of 30.3 million DKK compared to 2020.

Primary turnover was 680.2 million DKK, which is 25.7 million DKK lower than 2020. Heating tariffs were decreased as of 1.9.2021 following a reduction in oil prices and renewed calculation of the efficiency of private oil burners. This has influenced the turnover negatively in the amount of 6.9 million DKK. Decreased sale of heating at 6% has also reduced turnover by approx. 13 million DKK. This is caused by warmer climate in 2021.

Furthermore, sale of water for the fishing industry has failed compared to the previous year and finally less electricity has been used internally for, particularly, frost protection of water pipes.

Secondary turnover levels in 2020 and 2021. The service contract was reduced by 16.4 million DKK. This reduction is offset by increased earnings from street lighting, debtors' fees, more pipeline connections and own production on construction projects. In 2020, extra 7.9 million DKK was granted to the East Coast, which partly explains the reduction from 2020 to 2021. Goods and services were reduced by 11.9 million DKK, of which 12.2 million DKK pertains to fuel oil. The price of one litre was reduced by 15% at the beginning of May. This reduction affected the value of stock in the amount of 3.6 million DKK. Less than 1% additional fuel has been used in 2021 and the reduced cost of oil is caused solely by the price reduction. Surplus consumption despite decreasing sale of heating is caused by breakdowns at Nuuk. As stated in the primary revenue, there is a reduction in internal electricity consumption, but this is offset by higher consumption of goods from the sale of inventory.

As for salary and personnel the consumption is almost unchanged. This applies to both salary and personnel. More resources, however, have been allocated to recruitment, which is offset by equally less allocated to courses.

Capacity costs was 15.4 million DKK above the level of the previous year. In general, considerable yearly variations are seen as to where and for what purpose, particularly repair and maintenance costs are incurred. In 2021, significantly more resources are allocated to maintenance of the distribution network. Almost twice as much, namely about 31 million DKK. Inspection and repair of the transmission line from Qorlortorsuaq hydropower plant to Narsaq and Qaqortoq at 3.1 million DKK, network stations at Nuuk at 1.1 million DKK, charging stations for electrical cars at 1.8 million DKK, distribution network at Ilulissat at a further 1.1 million DKK in 2021. Distribution network at Ma-

niitsoq has entailed additional repair in the amount of 1.1 million DKK because of overhead power lines having been torn down by tow trucks, short circuit of a wiring cabinet, and replacement of corroded cable steel.

Exposure of Nukissiofiit has cost around an additional DKK 1 million in 2021. Consultancy has entailed additional costs of around DKK 8 million compared with the previous year. This is mainly due to the preliminary project for a wind turbine at Nanortalik being carried at a cost of DKK 4.1 million. Counselling of managers amounts DKK 0.6 million.

From 2020 to 2021 there was considerable underconsumption, mainly of production equipment. The cost totalled DKK 11.9 million below the level of 2020. Loss on debtors was reduced by DKK 0.8 million. 2020 saw a thorough adjustment of debtors which led to unusual, slightly increased loss. No doubt, continued focus on the area has had a positive influence on costs and debtors as such.

Depreciation and write-downs of assets amounted DKK 292.6 million net in 2021. In 2020, the amount was DKK 334.4 million. Net write-downs have decreased by DKK 48.9 million compared to 2020. Write-down on work in progress, in force in 2021, levels the depreciation in 2020.

Interest was DKK 75.6 million which is DKK 3.1 million below the previous year. Net loans were reduced. New loans are taken out at a lower interest rate than the average rate of the old loans, being repaid.

Debtors was DKK 123.6 million against DKK 140.5 million in 2020. Primary turnover was decreased by approx. 6.5 million DKK in the last month of the year. The above-mentioned adjustment of debtors in 2020 and focus on follow-up have also affected the number of debtors.

Liquidity was DKK 23.5 million at the beginning of 2021 against DKK 70.5 million at the end of 2020. The balance on the Landskassen overdraft, however, was DKK 93.7 million against a mere DKK 0.1 million at the end of 2020. It is really about an increase of liquidity in the amount of almost DKK 46 million which is due to several factors but mainly changes in working capital.

The total balance amounted to DKK 3.2 billion at the end of 2021 against DKK 3.3 billion in 2020. This represents a change of DKK -134 million, primarily because the impairment test gave rise to net depreciation in the amount of DKK 157.3 million in 2021. An opposite effect stems from the balance on the Landskassen overdraft. Net payable to Landskassen amounted to DKK 1.5 billion at the end of the year and only marginally less than in 2020. Equity is reduced, mainly in consequence of depreciation, and amounts to DKK 1.5 billion.

# APPLIED ACCOUNTING POLICIES

The annual accounts have been prepared in accordance with Greenlandic Parliament Regulation No. 24 of 22nd of December, 2017, on the financial reporting for net managed companies. Under the regulation, Nukissiorfiit is required to account according to the Danish Annual Accounts Act, primarily the provisions for accounting class C companies, Nukissiorfiit being a public utility company, subject to political price regulation.

#### Accounting Class

This annual report is prepared according to the Danish Annual Account Act for accounting class C (big companies), with adjustments because of the company's status as a net managed company, operated for societal benefit, in accordance with Greenland Parliament Regulation No. 12 of 3rd of November, 1994, regarding high current electrical power plants and electrical equipment as well as Greenland Parliament Regulation No. 14 of 6th of November, 1997, on energy supply.

Statement on deviations from the Danish Financial Statements Act, please see Greenland Parliament Regulation No. 24 of 22nd of December, 2017, on the financial reporting by net managed companies under the self-government of Greenland, §5.

As Nukissiorfiit has no share capital, equity cannot be divided into share capital and retained earnings. For this reason, statement on changes in equity has not been prepared.

Information on taxes which would normally appear from the accounts is not included as the company is non-taxable.

The need for write-downs has been calculated settlement by settlement, and product by product as the difference between a weighted and an estimated cost price. No discounting of future cash flows with recognised internal interest has been carried out. The method of calculation applied is believed to give a fair representation of the financial position of the individual settlements, while taking the character and management need of the company into consideration.

#### **Recognition and Measurement in General**

Income is recognised in the income statement as and when earned. External costs are recognized in the relevant financial year.

Assets are recognised in the balance when future financial benefits are likely to influx the company and a credible value of the asset can be measured.

Upon recognition and measurement, predictable losses and risks, arising prior to the presentation of the annual report and statements, confirming or cancelling conditions effective on the balance sheet date, are taken to account. The carrying value of intangible assets and tangible fixed assets is reviewed annually to detect any indication of impairment beyond regular depreciation. If any, it is written down at the lower recoverable value.

Obligations are recognised in the balance when future financial benefits are likely to influx the company and a credible value of the obligation can be measured.

At the first recognition, assets and liabilities are measured at cost price. Subsequently, assets and liabilities are measured as indicated for each, individual item.

Upon recognition and measurement, predictable losses and risks, arising prior to the presentation of the annual report and statements, confirming or cancelling conditions effective on the balance sheet date, are taken to account.

The carrying value of intangible assets and tangible fixed assets is reviewed annually to detect any indication of impairment beyond regular depreciation. If any, it is written down at the lower recoverable value.

#### **Net Turnover**

Net turnover comprises primarily turnover, which consists of sale of electricity, water and heating invoiced to customers.

Nukissiorfiit's primary turnover, sale of electricity, water and heating, is first and foremost calculated on the basis of remote reading of consumption meters.

Due to unstable connection to the meters, it is not always possible to a obtain readings, the consumption is based on previous readings. The accurate meter reading will be included in the turn-over once meter connection is re-established.

This is not believed to impact the annual accounts substantially.

#### Other Operating Income

Other operating income comprise, among others, payment on service contracts, fees and other turnover.

#### **Raw Materials and Consumables**

Costs of raw materials and consumables cover the amount consumed to reach the net turnover of the year.

#### **Other External Costs**

Other external costs comprise costs pertaining to primary activities, including operation of plants, rent, office supplies, sales promotion etc. The item contains write-down of receivables, added under trade receivables.

#### **Personnel Costs**

Personnel costs comprise salaries and wages as well as social security, pensions and the like for the employees..

#### Write-Downs and Depreciation

Write-downs and depreciation of tangible fixed assets and intangible assets cover the write-downs and depreciation in the accounting year and loss or gain pertaining to sale of tangible fixed assets and intangible assets.

Financial items comprise interest income and expense. Interest expense pertain primarily to payments to the Government of Greenland and are recognised at the time of accrual.

#### **Tangible Fixed Assets and Intangible Assets**

Buildings, production plants and machinery as well as other plants, operating equipment and inventory are measured at cost price, reduced by accumulated write-downs and depreciation. Cost price comprise acquisition price, expenses directly incurred from the acquisition and expenses for preparation of the asset until it is operable.

Own production is calculated at cost, including IPO. Test project plants that are not profitable at the time of acquisition are expensed.

As for rolling stock and equipment, depreciation takes effect in the month following acquisition.

Buildings and machinery are depreciated according to expected life span.

As a rule, IT acquisitions are expensed. If they form part of a large collective project with a multi-annual working life expectancy, they will be included under intangible fixed assets.

Linear depreciation is conducted, based on the following assessment of expected working life:

Buildings and facilities, distribution network included	5-80 years
Rolling stock and machinery	4-10 years
IT-projects and ERP-software	3-5 years

Assets costing less than DKK 50,000 per unit are fully expensed in the acquisition year.

Expected working lives and residual values are revaluated annually. Tangible assets are depreciated at recovery value if the latter is below the accounting value.

#### Nedskrivningstest

All buildings and plants per location and per product segment are impairment tested to identify any plant in need of regulation. Total costs and turnover of the company are included in the calculation. Only structural changes and special events of temporary nature will entail adjustment.

Basis for the calculation of adjustments is "The Regulation of the Greenlandic Parliament No. 22 of December 22nd ,2017 on the determination of prices for electricity, water and collective heating etc.", chapters 3 to 7 on calculation of Nukissiorfiit's unit costs and distribution accounts.

The unit cost per plant and product segment is compared to the plant's ability to generate turnover based on the current weighted average tariffs. The weighted average tariffs are also adjusted for any structural changes such as service contracts being included as tariff increase.

The accounts are based on locations and divided into segments and show the areas of profit or loss. The Distribution accounts are added as an appendix.

This ensures focus on the company's fixed assets as opposed to structural earnings capacity and structural cost level.

Write-downs on plants under construction are performed ongoingly, based on the possibly expected write-down of the finished plant.

#### **Treatment of Write-Downs**

If a deficit is estimated to be permanent, it will give rise to renewed write-down of fixed assets at loss-making locations and thus affect the result.

#### Treatment of Reversal of Write-Downs

If renewed impairment test shows profit, assets adjusted at previous year's impairment testing, now indicating a higher net asset value, the write-down will be reversed until the asset reaches its value before write-down.

Reversals of depreciated capital investments will be made to the profit and loss account.

Tilbageførsler af nedskrevne anlægsinvesteringer tilbageføres over resultatopgørelsen.

#### Inventories and supplies

Inventories are valued at average cost formula plus delivery costs, excluding stocks of fuel oil. Stocks of fuel oil are valued at cost. Write-downs are made at net realisable value, when it is below the purchase price.

Fuel oil and spare parts are included in the inventory value, please see note to inventory.

#### **Trade Receivables**

Trade receivables are valued at nominal with adjustments for on-account payments by deduction of provision for bad debts. Provision for bad debts is calculated on the basis of an assessment of the individual receivables.

#### **Cash and Cash Equivalents**

Cash and cash equivalents comprise cash holdings and bank deposits.

#### **Fixed Capital Contribution**

Fixed capital contribution is a historically calculated amount, designed to signal basic capital.

#### **Adjustment of Fixed Assets**

Comprise unrealised revaluation adjustments of the company's fixed assets. In 1998, the company transited from expense-based to cost-based accounting principles. In this connection, the value of the company's fixed assets was determined as the value of capital expenditure in the previous years, accumulated depreciation deducted. Other value regulations of the company's fixed assets have been carried out by offsetting entries in Adjustment of Fixed Assets.

In 2018, an impairment test was performed in connection with the company's transition to measurement principles that largely correspond to the principles of the Financial Statements Act. As this was an adjustment in connection with a change in principles, the value adjustment was also recognised in the net capital.

#### **Other Financial Obligations**

Other financial obligations are measured at amortised cost which usually equals nominal value.i.

#### **Cash Flow Statement**

The cash flow statement is presented according to the indirect method and shows cash flows from activities of operating, investing and financing, as well as cash and cash equivalents at the beginning and the end of the financial year.

Cash flows deriving from operating activities are calculated as operating profit adjusted for non-cash operating items, working capital changes and non-recognized operating grants from the Government of Greenland.

Cash flows from investing activities comprise payments in connection with purchase and sale of intangible assets and fixed asset investments.

Cash flows from financing activities include loans, repayment of interest-bearing debt and credit facility changes with the Government of Greenland. Cash and cash equivalents comprise bank deposits and cash holdings.

#### Key Ratio

Key ratios are prepared in accordance with the Danish Financial Supervisory Authority's Guide "Recommendation and Key Ratio". Reference is made to the summary of principal and key figures regarding the formula for calculating the individual ratios.

#### Key Ratio Formulas:

Return on assets: Operating profit as a percentage of balance sheet total Equity ratio: Equity as a percentage of balance sheet total.

# PROFIT AND LOSS ACCOUNT BALANCE SHEET

Assets

#### (DKK 1,000)

Note		2021	2020
1	Net turnover	680,238	705,760
2	Other operating income	107,461	112,055
	Total turnover	787,699	817,815
	Commodities and aid	(184,867)	(196,664)
	Other external costs	(179,191)	(163,774)
	GROSS PROFIT	423,641	457,377
3	Personnel costs	(193,759)	(197,205)
4	Depreciations and write-downs on assets	(292,569)	(334,401)
	OPERATING INCOME	(67,687)	(74,229)
	Financial income	15	14
5	Financial expenses	(75,578)	(78,660)
	RESULT FOR THE YEAR	(138,250)	(152,875)
	Result retained	(138,250)	(152,875)

(1.	00	0	kr.)	)

Note	
	Fixed assets
	INTANGIBLE FIXED ASSETS
6	Software
	Total intangible fixed assets
	TANGIBLE FIXED ASSETS
7	Buildings and plants
8	Plants under construction
9	Vehicles and equipment
	Total tangible fixed assets
	Total fixed assets
	Current assets
	Stocks on hand
10	Stocks

Total stocks on hand

2021	2020
5,441	0
5,441	0
2,764,773	2,861,405
64,645	130,178
15,586	15,426
2,845,004	3,007,009
2,845,004	3,007,009
75,310	81,907
75,310	81,907

# BALANCE SHEET

Assets

#### (DKK 1,000)

Note		2021	2020
	Accounts receivables		
11	Accounts receivables from sales and services	123,631	140,511
	Accounts receivables from Landskassen	93,730	57
12	Other accounts receivables	485	61
	Total accounts receivables	217,846	140,629
	Liquid reserves		
	Liquidity	23,351	70,458
	Total current assets	316,507	292,994
	Total assets	3,166,952	3,300,003

# BALANCE SHEET

Liability

(DKK 1,000) Note Equity capital Regular capital contribution 13 Adjustment fixed assets Result retained 14 Total equity capital Liabilities Long-term debts Long-term debts 15 Total Long-term debts Short-term debts 15 Current part of long-term debts Other liabilities to Landskassen Holiday pay and salaries payable Suppliers of goods and services Other debts Total current liabilities

#### Total liabilities and equity

16 Contingent liabilities and contractual obligations

2021	2020
37,160	37,160
1,314,768	1,314,768
112,310	250,560
1,464,238	1,602,488
1,547,000	1,557,672
1,547,000	1,557,672
70,670	
	70,200
0	70,200
0 23,299	
	0
23,299	0 22,428
23,299 31,098	0 22,428 34,108

# CASH FLOW STATEMENT

# NOTES

#### (1.000 kr.)

lote		2021	202
	Net profit for the year	(138,250)	(152,875
	Depreciation, amortisation and impairment of fixed assets	292,569	334,40
	Change in working capital	38,455	(33,773
	The liquidity impact of operations	192,774	147,75
	Purchase of fixed assets	(136,051)	(115,86
	Sale of fixed assets	43	54
	Liquidity impact of the investment	(136,008)	(115,320
17	Long-term loans	60,000	98,10
17	Instalments on long-term loans	(70,200)	(69,870
17	Change in the right of withdrawal	(93,673)	(3,705
	The liquidity impact of financing	(103,873)	24,52
	Total liquidity impact for the year	(47,107)	56,95
	Cash and cash equivalents January $1^{\mbox{\tiny st}}$	(70,458)	13,50
	Cash and cash equivalent December 31 <sup>st</sup>	23,351	70,45
	Cash and cash equivalents include:		
	Cash Balance	0	
	Bankbalance	23,351	70,45
	Total cash and cash equivalents	23,351	70,45

#### (DKK 1,000)

Note 1 Net Revenue
Sale of electricity
Sale of water
Sale of heating
Sale of residual heating
Total net revenue
Note 2 Other Operating Income
Product sales and rentals
Meter rental
Fees and connection fees
VMaintenance of street lighting, net
Service contract payments
Total other operating income
Note 3 Personnel Costs
Nukissiorfiit has no ongoing pension payments obligations.
Personnel costs can be specified as follows: Salaries and wages Other personnel costs Own production of constructed plants
Total personnel costs
Total salary for the Executive Board, including pensions etc.

In 2021, Nukissiorfiit had employees paid monthly and by the hour corresponding to 416 full-time employees, compared to 437 in 2020.

2021	2020
452,439	378,381
79,248	82,116
148,329	244,948
222	315
680,238	705,760
9,652	7,659
17,021	16,511
16,805	10,875
5,805	2,451
58,178	74,559
107,461	112,055
187,870	186,355
14,975	15,779
(9,085)	(4,929)
193,760	197,205
1,193	1,104

# NOTES

# NOTES

#### (DKK 1,000)

Note 4 Depreciation, Amortisation and Impairment of Assets	2021	2020
Amortisation of intangible assets	31	483
Depreciation of tangible fixed assets	135,255	128,203
Impairment of property, plants and equipment	157,328	206,225
Gain on disposal of fixed assets	(45)	(510)
Total depreciation, amortisation and impairment of assets	292,569	334,401
Note 5 Financial Expenses		
Interest on fixed assets	75,127	78,390
Interest expense Landskassen (Greenland Treasury)	0	35
Interest, banks	402	222
Miscellaneous interest	39	13
Total financial expenses	75,578	78,660
Note 6 Intangible Assets		
Acquisition cost		
At the beginning of the year	44,317	44,317
Additions during the year	5,472	0
Disposals during the year	0	0
Acquisition cost, end of year	49,789	44,317
Depreciation, amortisation and impairment		
Depreciation, at the beginning of the year	(44,317)	(43,833)
Depreciation for the year	(31)	(484)
Depreciation and amortisation, end of year	(44,348)	(44,317)
Book value as of December 31st	5,441	0

#### (DKK 1,000)

Note 7 Buildings and Plants
Acquisition cost
At the beginning of the year
Additions during the year
Disposals during the year
Acquisition cost, end of year
Impairment losses
Impairment losses, at the beginning of the year
Write-ups
Impairment losses
Reversed impairment losses on disposal of assets
Impairment losses, end of the year
Depreciation and amortisation

Depreciation at the beginning of the year

Addition of amortisation for the year

Depreciation during the year

Depreciation, end of year

Depreciation and amortisation, end of year

Book value as of December 31st

Note 8 Facilities Under Construction

Acquisition cost

At the beginning of the year

Additions for the year

Disposals during the year

Impairment losses during the year

Recognised as an asset

Acquisition cost, end of year

Book value as of December 31st

2021	2020
7,416,255	7,354,835
147,541	61,420
(677)	0
7,563,119	7,416,255
(1,422,431)	(4,611,817)
7,485	384,201
(122,925)	(206,225)
645	0
(1,537,226)	(1,422,431)
(3,132,419)	(3,011,410)
(128,733)	(121,009)
32	
(3,261,120)	(3,132,419)
(4,798,346)	(4,554,850)
2,764,773	2,861,405
130,178	80,421
133,799	112,628
(153,014)	(61,420)
(41,889)	
(4,429)	(1,451)
64,645	130,178W

# NOTES

#### (DKK 1,000)

Note 9 Vehicles and Equipment	2021	2020
Acquisition cost		
At the beginning of the year	83,112	82,259
Additions during the year	6,682	4,684
Disposals during the year	(242)	(3,831)
Acquisition cost, end of year	89,552	83,112
Depreciation and amortisation		
Depreciation at the beginning of the year	(67,686)	(64,294)
Addition of amortisation for the year	(6,522)	(7,193)
Reversed amortisation on disposals for the year	242	3,801
Depreciation and amortisation, end of the year	(73,966)	(67,686)
Book value as of December 31st	15,586	15,426
Note 10 Inventories and Supplies		
Fuel oil	21,478	27,775
Lubricating oil	4,242	4,159
Spare parts and consumables	49,590	49,973
Total	73,310	81,907

# NOTES

#### (DKK 1,000)

Note 11 Receivables from Sales and Services	2021	2020
The gross amount of DKK 130.6 million has been adjusted by D The corresponding adjustment at the end of 2020 totalled DKK oldest balances.		
Age distribution (DKK 1,000)		
0 - 30 days	116,154	124,430
30 days – 6 months	6,274	11,774
6 – 12 months	1,203	4,307
Older	0	0
Total	123,631	140,511
Note 12 Other Receivables		
The item "Other receivables" consists primarily of deposits paid		
Note 13 Adjustment of Fixed Asset Values		
1998	1,831,067	1,831,067
2004	742,294	742,294
2005	(36,438)	(36,438)
2006	7,851	7,851
2007	(14,594)	(14,594)
2008	4,683	4,682
2009	2,882	2,882
2011	(6,770)	(6,770)
2018	(1,216,206)	(1,216,206)
l alt	1,314,768	1,314,768

Adjustments of fixed asset value are the value adjustments of fixed assets over time - which are not recognised in the income statement.

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# NOTES

# NOTES

#### (1.000 kr.)

Note 14 Retained Earnings	2021	2020
Transferred from previous years	250,560	428,062
Correction to opening balance, impairment adjustment of assets disposed of	0	(24,627)
Retained earnings for the year	(138,250	(152,875)
Total	112,310	250,560
Note 15 Long-Term Debt, Due After 5 years		

The company cannot raise external loans, but receive loans from the Government of Greenland only, which is effectively an expression of internal organisational financing. The agreed repayment rate entails long-term debt, maturing after 5 years, to amount to DKK 1,295 million. In 2021, the amount was DKK 1,305 million.

#### Note 16 Contingent Liabilities/Receivables and Contractual Obligations

Residential transport obligations in connection with employee resignation have not been calculated. Significant contractual obligations: Significant contractual obligations are entered into on an ongoing basis regarding construction projects that are financed via the Finance Act or where authorisation has been granted by the Government of Greenland to self-finance the construction projects.

Nukissiorfiit is continuously involved in joint land development projects in co-operation with municipalities, under contract of sharing joint costs. Postponements or execution errors may occur and have a financial impact. One such incident occurred in 2018, which is recognised as a contingent liability of DKK 5 million.

#### (DKK 1,000)

Note 17 Payments to Landskassen (Greenland Treasury) from Nukissiorfiit	2021	2019
Payments to Landskassen (Greenland Treasury) from Nukissiorfiit		
Repayment of long-term loans	70,200	69,870
Interest on fixed asset loans	75,127	78,390
Interest on overdraft facility	0	35
Positive DAU effect on Landskassen	145,327	148,295
Change to balance on the overdraft facility	93,673	3,705
Positive liquidity effect on Landskassen	239,000	152,000
Payments from Landskassen to Nukissiorfiit		
Net appropriation for the year	(58,178)	(66,659)
Appropriations for construction projects	0	(7,900)
Long-term loans	(60,000)	(98,100)
Landskassen's share of streetlighting	(6,459)	(4,506)
Negative DAU effect on Landskassen	(124,637)	(177,165)
Change to balance of the overdraft facility	0	0
Negative liquidity effect on Landskassen	(124,637)	(177,165)
Nukissiorfiit's net DAU effect on Landskassen	114,363	(28,870)
Nukissiorfiit net liquidity impact on Landskassen	114,363	(25,165)

# APPENDIX 1

Results per Location and Segment for Electricity, Water and Heating for Each Town/Settlement

	Ϋ́					ψ̈́		222 <b>11111</b>	
	<b>.</b>								
(DKK 1.000)	Electricity	Water	Heating	Total	Continued (DKK 1.		Water	Heating	Total
Nanortalik	(15.546)	(3.103)	256	(18.394)		issat 13.199	2.245	(9.934)	5.510
Aappilattoq	(1.464)	(503)		(1.967)		atsut (1.286)	(485)		(1.771)
Narsarmijit	(1.119)	(1.042)		(2.161)		ertaq (1.676)	(544)		(2.220)
Tasiusaq	(739)	(865)		(1.604)		qqaq (2.040)	(239)		(2.278)
Ammassivik	(1.140)	(398)		(1.539)		anaq (1.082)	(825)		(1.907)
Alluitsup Paa	(1.848)	(1.779)		(3.627)	Qeqertar	-	(1.443)		(7.054)
Qaqortoq	(10.410)	(2.745)	(1.556)	(14.711)	Kang		(297)		(906)
Saarloq	(908)	(231)		(1.139)	Uumma	•	(2.788)	(164)	(13.903)
Eqalugaarsuit	(1.507)	(779)		(2.286)	Niaq		(430)		(1.276)
Qassimiut	(686)	(118)		(804)	Qa	arsut (1.124)	(930)		(2.054)
Narsaq	5.511	(3.199)	(74)	2.237		rasak (950)	(385)		(1.335)
Igaliku	(1.210)	(223)		(1.433)	Sa	attut (1.247)	(667)		(1.913)
Qassiarsuk	(318)	(945)		(1.264)	Ukkus	sissat (839)	(469)		(1.308)
Paamiut	(6.629)	(1.071)	(946)	(8.646)	Uper	navik (10.632)	(4.164)	40	(14.756)
Arsuk	(1.675)	(769)		(2.444)	Upernavik Kuj	alleq (1.652)	(215)		(1.867)
Nuuk	117.679	969	28.031	146.679	Kangersua	tsiaq (1.963)	(317)		(2.280)
Qeqertarsuatsiaat	(1.618)	(1.418)	125	(2.910)	Aappil	attoq (1.460)	(381)		(1.841)
Kapisillit	(840)	(713)		(1.553)	Nutaa	miut (897)			(897)
Maniitsoq	(12.434)	(1.546)	1.429	(12.551)	Tasi	usaq (1.736)	(789)		(2.524)
Atammik	(1.406)	(1.424)		(2.830)	Nwuus	suaq (2.573)	(205)		(2.778)
Napasoq	(1.671)	(1.234)		(2.905)	Kullor	suaq (1.613)	(1.716)		(3.329)
Kangaamiut	(1.977)	(1.615)		(3.592)	Na	ajaat (761)			(761)
Sisimiut	23.247	487	(6.012)	17.722	Innaa		(219)		(1.907)
Itilleg	(1.921)	(395)		(2.316)	Qaa	naaq (5.434)	(2.978)	(1.847)	(10.259)
Sarfannguit	(1.498)	(942)		(2.440)		ssivik (1.296)	(295)		(1.591)
Kangaatsiag	(2.882)	(2.375)		(5.257)	Siora		(780)		(1.224)
Attu	(1.199)	(1.371)		(2.570)	Qeq				(550)
lginniarfik	(1.259)	(530)		(1.790)		siilaq (3.227)	(2.053)	(177)	(5.456)
Niagornaarsuk	(1.387)	(1.095)		(2.482)	Sermili		(187)	()	(1.058)
Ikerasaarsuk	(1.677)	(518)		(2.196)		ortoq (1.088)	(235)		(1.323)
Aasiaat	(20.405)	(2.390)	2.666	(20.129)		usuk (604)	(397)		(1.001)
Akunnaag	(788)	(305)	2.000	(1.093)	Tinited		(183)		(1.100)
Kitsissuarsuit	(1.256)	(454)		(1.710)	Kuum		(542)		(2.141)
Qasigiannguit	(8.277)	(2.050)	1.439	(8.888)	Ittoqqortoo		(1.272)		(4.985)
lkamiut	(928)	(2.030)	1.455	(1.909)	πισμοτισο	(5./15)	(1.2/2)		(4.505)
IKarriiut	(920)	(901)		(1.909)	т	OTAL (21.965)	(61.857)	13.276	(70.545)
					I.	(21.903)	(01.057)	15.270	(70.3-3)











Profit









### **APPENDIX 2 Distribution Accounts**

#### THE DISTRIBUTION ACCOUNTS HAVE BEEN AUDITED BY DELOITTE. AND HAVE BEEN PROVIDED WITH A SEPARATE AUDITOR'S REPORT

Nukissiorfiit's annual distribution accounts show Nukissiorfiit's The impairment of DKK 1.6 billion in 2018 has inherently changed expenses for the production and supply of electricity, water and the distribution accounts significantly. In order to maintain conheating to the individual locations. The unit costs for electricity, sistency with the expenses incurred for capital investments and, water and heating indicate the total costs per unit, i.e. per m<sup>3</sup> of thus, provide a cost-based insight into the production costs for water, per kWh of electricity and per MWh of heating. Unit costs each location, the unit costs are calculated at the non-depreciinclude cost of sales, personnel costs, capacity costs, depreciation, amortisation and interest.

The costs vary greatly from place to place. This is partly due to a The map on the next page shows the unit costs at the towns in varying form of production and because sales are very low in 2021, while the table shows the unit costs for all locations supsome places, resulting in high unit costs. When calculating unit plied by Nukissiorfiit. costs in places where relatively small amounts of energy and water are sold the cost sensitivity is high.

Nukissiorfiit dimensions its plants 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 The Distribution Accounts 2021 are an extract of the "Distribucorrelation between unit costs and demand as well as econo- tion Accounts 2018-2021", which have been audited by Deloitte. mies of scale. This means that society usually benefits from the Deloitte has provided "Distribution Accounts 2018-2021" with a high demand of the fishing industry, even if it leads to larger separate auditor's opinion. plants.

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

The distribution accounts are calculated on the basis of the principles laid down in the Government of Greenland's Executive Order No. 22 of December 22nd, 2017, on the determination of prices for electricity, water and collective heating etc.



### APPENDIX 2 Production costs for each location

	Ϋ́				Ϋ́		222
	Electricity	Water	Heating		Electricity	Water	Heating
	DKK/kWh	DKK/m <sup>3</sup>	DKK/MWh	Continued	DKK/kWh	DKK/m <sup>3</sup>	DKK/MWh
Nanortalik	6,87	66,77	354,77	Uummannaq	3,54	67,48	783,06
Aappilattoq	7,09	242,09		Niaqornat	7,76	531,63	
Narsarmijit	7,08	1.305,06		Qaarsut	4,95	475,59	
Tasiusaq	8,37	1.750,57		Ikerasak	2,95	97,61	
Ammassivik	10,27	853,03		Saattut	3,23	191,55	
Alluitsup Paa	5,52	580,10		Ukkusissat	3,14	254,54	
Qaqortoq	2,06	36,14	837,26	Upernavik	4,13	205,10	292,01
Saarloq	14,51	1.074,69		Upernavik Kujalleq	5,22	83,65	
Eqalugaarsuit	11,72	932,99		Kangersuatsiaq	9,62	470,48	
Qassimiut	9,14	59,05		Aappilattoq	4,20	149,17	
Narsaq	2,06	64,20	25,72	Nutaarmiut	16,98		
Igaliku	13,13	277,03		Tasiusaq	3,70	137,07	
Qassiarsuk	3,67	1.644,38		Nuussuaq	5,28	105,83	
Paamiut	3,10	29,43	829,70	Kullorsuaq	4,09	614,67	
Arsuk	5,96	272,67		Naajaat	15,18	0.00 70	
Nuuk	0,83	18,49	212,45	Innaarsuit	3,91	269,32	4 5 7 0 7 0
Qeqertarsuatsiaat	4,06	294,71	19,99	Qaanaaq	4,88	357,11	1.530,79
Kapisillit	4,88	637,11		Savissivik	9,61	3.961,32	
Maniitsoq	2,84	27,49	668,29	Qeqertaq	5,94	2.995,34	
Atammik	4,69	439,31		Siorapaluk	87,28	47.44	507.00
Napasoq	9,78	1.100,59		Tasiilaq	2,33	47,11	597,86
Kangaamiut	4,43	254,38		Sermiligaaq	4,84	169,52	
Sisimiut	0,77	11,91	821,27	Isortoq	9,90	414,19	
Itilleq	11,56	445,34		Kulusuk Tirrita rilaa r	8,01	94,12	
Sarfannguit	3,82	511,38		Tiniteqilaaq	6,73	297,19	
Kangaatsiaq	3,51	197,86		Kuummiut	3,70	80,58	
Attu	4,85	406,51		Ittoqqortoormiit	4,99	213,60	
lginniarfik	10,99	988,41					
Niaqornaarsuk	5,34	345,97		Where Nukissiorfiit of value has been enter		e product in o	question no
lkerasaarsuk	10,66	326,55	F11 OF	value has been enter	eu.		
Aasiaat	3,40	24,64	511,85				
Akunnaaq Kitsissuarsuit	5,01	294,67					
	9,20	1.077,93	E02 EE				
Qasigiannguit Ikamiut	3,61 5,47	39,79	502,55				
	5,47	852,22	E00.49				
<b>Ilulissat</b> Oqaatsut	1,62 10,81	9,33 696,15	509,48				
Qeqertaq	4,54	696,15 253,57					
Saqqaq	4,54 5,35	253,57 93,91					
Ilimanaq	4,26	241,52					
Qeqertarsuaq	3,58	57,11					
	17.70	7 170 00					

13,36 3.130,66

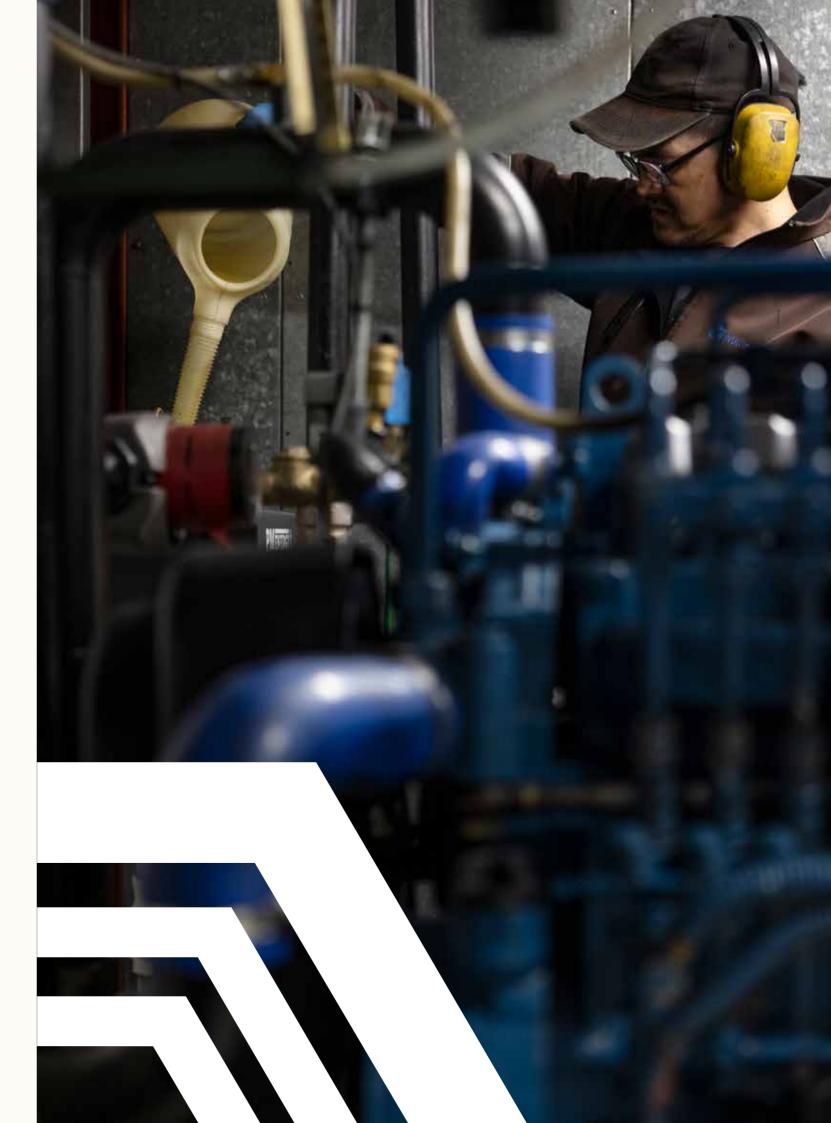
Kangerluk



# $\begin{array}{c} APPENDIX \ 3 \\ \mbox{Diesel and } CO^2 \ \mbox{accounts for production of electricity and heating} \end{array}$

Nukissiorfiit's diesel and  $CO^2$  accounts show Nukissiorfiit's diesel consumption in connection with the supply of electricity and heating to the individual locations, and also how much  $CO^2$  is emitted from this supply. The amount of diesel used – and therewith the amount of  $CO^2$  emitted – varies from location to location. The diesel and  $CO^2$  accounts illustrate that Nukissiorfiit uses significantly less diesel at towns with hydropower and other renewable energy sources. The diesel and  $CO^2$  accounts do not form part of Nukissiorfiit's annual accounts and for this reason no audit has taken place.

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	Electricity Oil	Electricity Kg. CO2	Heating Oil	Heating Kg. CO <sub>2</sub>		Electricity	Electricity Kg. CO.	Heating Oil	Heating Kg. CO	
	consumption litre per kWh	emitted per c prod. kWh l	onsumption	emitted per prod. kWh	Fortsat	consumption litre per kWh	emitted per c		emitted per prod. kWh	
Nanortalik	0,314	0,842			Aasiaat	0,296	0,794	0,086	0,231	
Aappilattoq	0,492	0,961			Akunnaaq	0,247	0,661			
Narsarmijit	0,364	0,827			Kitsissuarsuit	0,458	1,226			
Tasiusaq	0,274	0,978			Qasigiannguit	0,288	0,771	0,054	0,146	
Ammassivik	0,350	0,912			Ikamiut	0,359	0,963			
Alluitsup Paa	0,425	0,857			Ilulissat	0,308	0,825	0,001	0,004	
Qaqortoq	0,030	0,027	0,066	0,176	Oqaatsut	0,479	1,283			
Saarloq	0,411	1,118			Qeqertaq	0,002	0,004			
Eqalugaarsuit	0,338	0,843			Saqqaq	0,647	1,733			
Qassimiut	0,319	0,840			Ilimanaq	0,320	0,856			
Narsaq	0,019	0,020			Qeqertarsuaq	0,357	0,957			
Igaliku	0,105	0,237			Kangerluk	0,342	0,917			
Qassiarsuk	0,192	0,159			Uummannaq	0,297	0,795			
Paamiut	0,293	0,720	0,069	0,184	Niagornat	0,434	1,164			
Arsuk	0,364	0,888			Qaarsut	0,388	1,041			
Nuuk	0,003	0,001	0,005	0,015	lkerasak	0,290	0,777			
Qeqertarsuatsiaat	0,246	0,365			Saattut	0,357	0,957			
Kapisillit	0,212	0,707			Ukkusissat	0,259	0,694			
Maniitsoq	0,280	0,722	0,061	0,164	Upernavik	0,302	0,809			
Atammik	0,289	0,724			Upernavik Kujalleg	0,362	0,969			
Napasoq	0,274	0,812			Kangersuatsiaq	0,587	1,574			
Kangaamiut	0,295	0,648			Aappilattoq	0,203	0,545			
Sisimiut	0,004	0,002	0,041	0,110	Nutaarmiut	0,568	1,523			
Itilleq	0,560	0,731			Tasiusag	0,305	0,817			
Sarfannguit	0,289	0,781			Nuussuag	0,516	1,382			
Tasiilaq	0,019	0,051			Kullorsuaq	0,310	0,851			
Sermiligaaq	0,264	0,709				0,133	0,357			
Isortoq	0,500	1,340			Naajaat					
Kulusuk	0,224	0,600			Innaarsuit	0,305 0,328	0,817 0,879	0,083	0.222	
Tiniteqilaaq	0,266	0,712			Qaanaaq			0,085	0,222	
Kuummiut	0,287	0,769			Savissivik	0,576	1,544 0,659			
Ittoqqortoormiit	0,349	0,936			Siorapaluk	0,246	0,059			
Kangaatsiaq	0,258	0,693								
Attu	0,328	0,879								
lginniarfik	0,459	1,230								
Niaqornaarsuk	0,321	0,861								



68

0,753

lkerasaarsuk

2,017