





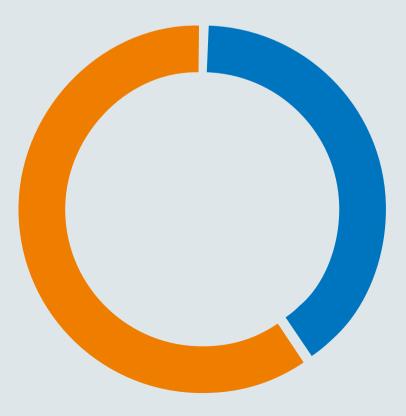
# **SHARE INFORMATION**

ISIN: DE0007830572 WKN: 783057 Exchange segment: Open Market, Scale of the Frankfurt Stock Exchange Ticker Symbol: 4DS Fiscal Year End: 31 December

# SHAREHOLDER STRUCTURE AS AT 31 DECEMBER 2018

Number of Shares:	5,989,500	100.00 %
Daldrup Family:	3,526,887	58.88 %
Free Float:	2,462,613	41.12 %

DALDRUP FAMILY:	58.88 %
FREE FLOAT:	41.12%



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Please note that rounding differences may occur if rounded amounts or percentages are used due to commercial rounding practices.

#### FOREWORD BY THE MANAGEMENT BOARD

Dear Ladies and Gentlemen, Dear Shareholders

Last year was a challenge for our company in a previously unknown dimension: Unfortunately, with total Group output of EUR 34.9 million in the year under review, we significantly missed the target figures for the 2018 financial year formulated in our forecast. The operating result (EBIT) was clearly negative with a loss of EUR 16.3 million. We greatly regret this extraordinary development and of course we are committed to a self-critical review of our work processes and the business model of Daldrup & Söhne AG.

On the one hand, financial year 2018 was characterized by a very good order situation in all four business units as well as by the technical resumption of electricity production at the Landau geothermal power plant. On the other hand, however, special circumstances in drilling orders and one-time effects as well as a power production of the power plants in Landau and in particular Taufkirchen, which fell short of expectations, shifted the profits considerably into the red. The problems in Taufkirchen have massively increased the investment requirements there and caused considerable downtime expenses. Mobilization of the full capacity of the power plant requires further conversion measures. Only then can it be fully exploited.

One thing is clear: In a situation like this everything is put to the test. A loss of this magnitude and the mentioned delays in drilling and power plant projects call for structural repercussions in the company as well as a change in the strategic direction in order to be able to guide the Group reliably into the future.

The Management Board is prepared to do so and – in addition to the first measures already initiated with the approval of the Supervisory Board – will shortly submit additional proposals for resolution to the Supervisory Board.

The clear focus of the realignment is on the core business as a drilling service provider in shallow and deep geothermal energy. This refers to economically attractive overall geothermal projects (such as turnkey heating plants), high-margin projects for water extraction, deep exploratory drilling and corresponding projects in the EDS division. Furthermore, the project and capital risks in the power station sector are supposed to be balanced in the future so that they correspond to the medium-sized capabilities of the Daldrup & Söhne Group. Consequently, Daldrup & Söhne AG will preferably only participate as a minority shareholder in energy generation projects (power plant project companies) and energy marketing (power plant operating companies).

The company has taken a major step in this direction with Hamburgbased IKAV, a private equity investor specialising in renewable energies and energy efficiency. The ownership share in the Landau power plant and the Geysir Europe Group will facilitate the deconsolidation of Geysir Group's shareholding and the drastic reduction of liabilities in the consolidated balance sheet.

Moreover, the intra-group structures, and in particular the management and control mechanisms in the company, will be significantly improved. The first personnel and organisational adjustments have already been addressed in the current financial year and partly implemented. This includes the reorganisation of the Management Board. The finance department, including controlling, is being filled and strengthened, and the power plants segment is also being reinforced. Additional steps will follow. The generally good business environment is really giving us a boost. The high demand for drilling services from our four business segments continues unabated. Private investors as well as municipal companies are interested and willing to invest in geothermal power and heating plants.

Examples include the Swiss company Nagra, the Munich municipal utility and the Landau power plant. On behalf of Nagra, we have been conducting exploratory drilling in Switzerland since April 2019 in order to identify a suitable location for a geological repository for radioactive waste. For Daldrup, this is a large-scale project over a period of several years with a potential order volume running well into tens of millions. For the Munich municipal utility, Daldrup is drilling six doublets for a geothermal heating plant by 2020 to supply the Munich population with renewable energy. Negotiations on the expansion of the contract are underway. The geothermal power plant in Landau is in full operation. It produces electricity without any issues. We are satisfied with the economic results of the operation and are fully on budget.

The benefits of geothermal energy for a successful energy transition are still evident: Geothermal electricity and heat are generated almost  $CO_2$ -neutrally, are eligible for base-load and are decentralised, i.e. received by the consumers in the region of the production. They are an essential supplement to the volatile wind and solar capacities in the energy mix of renewable energies. No other source of energy than geothermal energy comes closer to the objective of a sustainable, preferably regional energy supply with the lowest possible  $CO_2$  emissions.

The order books of Daldrup & Söhne AG are full, the order pipeline is filled up, and a decline in demand is not in sight. The political framework conditions for geothermal energy in the electricity and heating sectors are stable, as far as this can be assessed from today's perspective. We believe we have an attractive business model in combining project-based drilling services and operating geothermal power plants with their predictable cash flows. We therefore also stick to the above-mentioned assumptions regarding the strategic orientation of a medium-sized energy supplier based on geothermal energy.

That is what we are aiming for. However, the outlined measures also make it clear that the 2019 financial year will be a transitional year. But we are sure: The drilling orders mentioned above plus another one in the Netherlands, the overall good order backlog and good capacity utilisation across all business units as well as the Landau power plant will deliver solid revenues and earnings contributions. Therefore, the Executive Board is assuming consolidated total output of around EUR 40 million and a balanced EBIT result for the current financial year.

We extend our gratitude and appreciation to our employees. We are glad to know that we can count on their reliable commitment and dedication again in the current financial year!

Best regards and Glück auf!

Grünwald, May 2018

Josef Daldrup (CEO)

Peter Maasewerd (Board member)

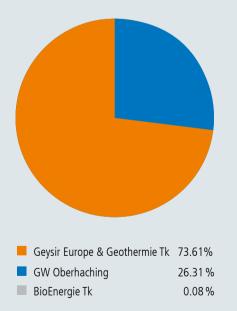
Andreas Tönies (Board member)

# **GEOTHERMAL POWER PLANT TAUFKIRCHEN**

Project:
Project company:
Company share:
<b>Energy production:</b>
Customer:
Thermal water:

Geothermie Taufkirchen, Taufkirchen (Tk) south of Munich (Bavaria) GeoEnergie Taufkirchen GmbH & Co. KG indirectly 55.21 % (73.61 % via Geysir Europe GmbH) 21,000 MWh electricity, 61,000 MWh district heating EEG plant, local district heating network operators 120 litres per second with approx. 138 °C

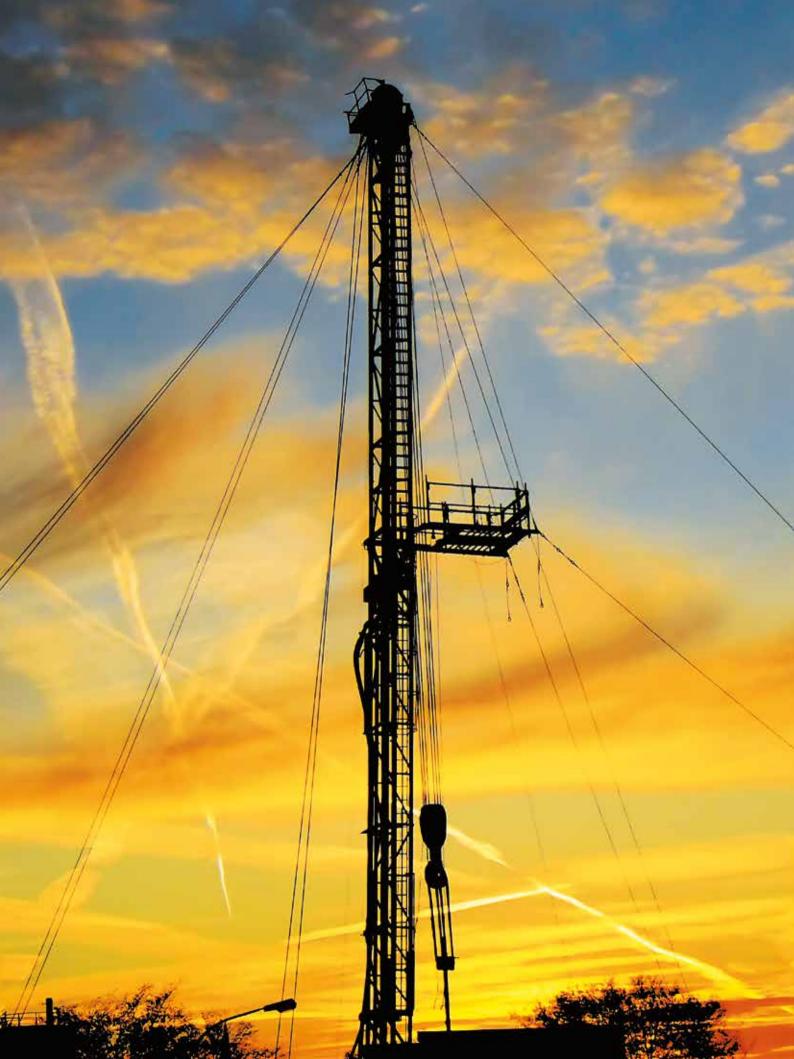
PROJECT COMPANY: GEOENERGIE TAUFKIRCHEN GMBH & CO. KG







Last update: 31.12.2018



# **GEOTHERMAL POWER PLANT NEURIED**

Project:	Geothermie Neuried, Neuried im Ortenaukreis (Baden-Wuerttemberg)
Project company:	Geothermie Neuried GmbH & Co. KG
Company share:	indirectly 75%
	(via Geysir Europe GmbH)
Energy production:	16,000 MWh of electricity,
	approx. 10,000 MWh District heating
Customer:	EEG plant, local district heating
	network operators
Thermal water:	75 litres per second at approx. 125 °C
	(expected)

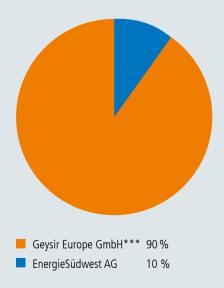
# GEOTHERMAL POWER PLANT LANDAU IN PALATINATE

Project:	Geothermie Landau, Landau i. d. Pfalz (Rhineland-Palatinate)
Project company:	geox GmbH
Company share:	indirectly 67.51 %
	(via Geysir Europe GmbH)
Energy production*:	15,300 MWh of electricity,
	7,000 MWh District heating
Customer:	EEG plant, local district heating
	network operators
Thermal water:	56 litres per second at approx. 158 °C

\*Operating data from 2013, availability in 2013 was 98.7 %







themische energie



Last update: 31.12.2018



## SUPERVISORY BOARD REPORT FOR THE 2018 FISCAL YEAR

Dear Shareholders,

During the 2018 financial year, the Supervisory Board performed their duties as stipulated by law, the Articles of Association and the Rules of Procedure. They advised the Management Board concerning the management of the Company and monitored them in connection of their conduct of the Company's business on the basis of all information made available to the Supervisory Board. To this end, the Supervisory Board was informed regularly and contemporaneously about the course of business in the four business segments, the Group's economic situation, the risk situation, in particular the status of the Landau and Taufkirchen geothermal projects and current issues. This was done at and outside of Supervisory Board meetings by means of written or verbal reports. For this purpose, the Supervisory Board received information or documents concerning plans, key strategic decisions and the net assets, financial position and results of operations. Departures from specified plans and from the objectives, in particular in the construction of power plants, were discussed intensively by the Supervisory Board. Opportunities and risks related to the course of business were regular topics of the Supervisory Board's deliberations.

The Chairman of the Supervisory Board was also in contact with the Management Board outside of meetings and was informed about significant developments that were material for the assessment of the given situation and for the management of the Company. The Supervisory Board's deliberations at all meetings during the reporting period focused on organisational and personnel structures within the Daldrup Group, operational business development and the further refinement of the Daldrup business model. The Supervisory Board regularly discussed the development of the order situation within the individual business segments, project progress for major deep geothermal projects, the situation regarding the power plants and power plant planning at the Taufkirchen and Landau and Neuried and Puchheim sites, respectively, as well as the regulatory environment in Germany and other European countries.

#### **MEETINGS AND KEY TOPICS**

Five ordinary Supervisory Board meetings were held during the 2018 fiscal year on 15 March, 18 May, 28 August, 20 September and 29 November. All Supervisory Board members attended these meetings in person and, in exceptional cases, by telephone. No committees were formed, for reasons of efficiency.

The Supervisory Board meeting on 15 March discussed critical issues of corporate organisation, the status of the Taufkirchen and Landau power plants, and power plant planning for Neuried and Puchheim. Opportunities and upcoming activities related to deep geothermal drilling in the Netherlands, Belgium, Poland, Switzerland and Italy were discussed. The Management Board also explained the development of the Company's individual business segments, the financial position of the AG and the Group, and the course of the cash capital increase in February 2018. Details were then discussed in committee. An 8-point plan to improve internal organisation was subsequently adopted by circular resolution on 16 March of this year, including among other things a change to the allocation of responsibilities within the Management Board.

At the Supervisory Board meeting on 18 May, the Management Board explained the annual financial statements and consolidated financial statements for Daldrup & Söhne AG and the Group for the 2017 fiscal year as well as the Management Board's proposal for the appropriation of net retained profits. This meeting was attended by the Management Board and the auditors. They explained the primary findings of their audit. Questions from Supervisory Board members and individual issues were discussed intensively and in detail. Bottlenecks in accounting and controlling and thus weaknesses in the internal control system were addressed. The Supervisory Board took note of the financial statements and management reports and agreed to take a decision on the annual financial statements and consolidated financial statements for Daldrup & Söhne AG and the Group for the 2017 fiscal year, respectively, as well as on the proposal of the Management Board for the appropriation of net retained profits and the dependent company report from the Management Board in the form of a telephone conference following its own detailed review. In the course of these meetings, the Supervisory Board determined that there were no objections to be raised and, by circular resolution dated 28 May 2018, approved the annual financial statements and management reports for the 2017 fiscal year presented by the Management Board for the Company and the Group as well as the dependent company report from the Management Board.

The annual financial statements of the Company were thus adopted (section 172 of the German Stock Corporation Act (AktG)). The Supervisory Board also approved the Management Board's proposal for the appropriation of net retained profits.

Following a report by the Management Board on individual drilling and power plant projects and on the order backlog, the Supervisory Board was also informed at this meeting about the status of the Landau power plant and the completion of the Taufkirchen power plant. Personnel issues and the status of the Puchheim heating plant project were also discussed. The agenda items and proposed resolutions for the 2018 Annual General Meeting were presented and the Supervisory Board approved them. The Supervisory Board unanimously granted approval to the Management Board for transactions requiring such approval. The Supervisory Board resolved to extend the appointment of Mr. Curd Bems to the Management Board by one year until 15 March 2019.

At its meeting on 28 August, the Supervisory Board discussed the acquisition of further shares in the operating company for the Landau geothermal power plant. The Supervisory Board approved of the proposed resolution regarding the acquisition.

At its meeting on 20 September, the Supervisory Board discussed the half-year consolidated financial statements and business development for the first seven months of the fiscal year. The Management Board presented the status of individual drilling projects and the development of the order situation within the individual divisions. In particular, the committee again discussed the Taufkirchen and Landau power plant projects, the situation at the Dutch subsidiary and developments in the markets in Germany, the Netherlands, Belgium, Switzerland and Poland.

At their meeting on 29 November, the Supervisory Board discussed in particular pending problems and issues relating to the Taufkirchen and Landau power plants as well as personnel and organisational issues at the parent company and the subsidiaries – including the implementation of the 8-point plan of 16 March 2018. In this context, the Supervisory Board also discussed current business trends as of September 2018 and the future development of the corporate structures. The Management Board also provided information on drilling projects in Germany and ongoing projects in Belgium, the Netherlands and Switzerland.

There were no conflicts of interest among members of the Supervisory Board during the reporting period.

#### **ORGANISATION OF THE SUPERVISORY BOARD**

The members of the Supervisory Board during the year under review were Wolfgang Clement (Chairman), Wolfgang Quecke (Deputy Chairman) and Joachim Rumstadt. They have been elected until the end of the Annual General Meeting which resolves on the discharge of the members of the executive bodies for the 2021 fiscal year.

There were no personnel changes on the Management Board in the year under review. The Management Board contract with Curd Bems was renewed until 15 March 2019 with a new remit.

# AUDIT OF THE ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS FOR THE 2018 FISCAL YEAR

The Management Board has prepared the annual financial statements, the consolidated financial statements and the group management report for Daldrup & Söhne AG for the 2018 financial year in accordance with the provisions of the German Commercial Code. Warth & Klein Grant Thornton AG, Auditing Company, Düsseldorf, which was elected as auditor by the Annual General Meeting on 29 August 2018, audited the annual financial statements, the consolidated financial statements and the Group management report for Daldrup & Söhne AG for the 2018 fiscal year, including the accounting, and issued an ungualified audit opinion in each case. The Supervisory Board satisfied itself of the independence of the auditor and of the persons acting on behalf of the auditor. The annual financial statements, the consolidated financial statements, the group management report and the auditor's reports were made available to, and acknowledged by, all members of the Supervisory Board. These documents were discussed in detail by the Supervisory Board together with the Management Board and the auditor, who reported on the primary results of the audit and was available to provide information and explanations, at a meeting of the Supervisory Board on 22 May 2019 and at further telephone conferences on 30 and 31 May 2019.

In this context, ongoing weaknesses in the accounting process, the internal control system and the risk management system were again addressed and their elimination was called for.

Thereafter, the Supervisory Board approved the results of the audit on 31 May 2019 by way of a circular resolution with one abstention and approved the annual financial statements, the consolidated financial statements and the group management report prepared by the Management Board for the year ended 31 December 2018.

The annual financial statements for Daldrup & Söhne AG for the 2018 fiscal year have thus been adopted in accordance with section 172 of the German Stock Corporation Act.

#### **DEPENDENCY REPORT**

The dependent company report as of 31 December 2018 prepared by the Management Board contains, in accordance with the audit by the public audit company, the prescribed disclosures pursuant to section 312(1) of the AktG and concludes that Daldrup & Söhne AG was not disadvantaged with regard to the presented legal transactions and measures, and received appropriate consideration. The financial statement auditor issued the following unqualified auditor's opinion:

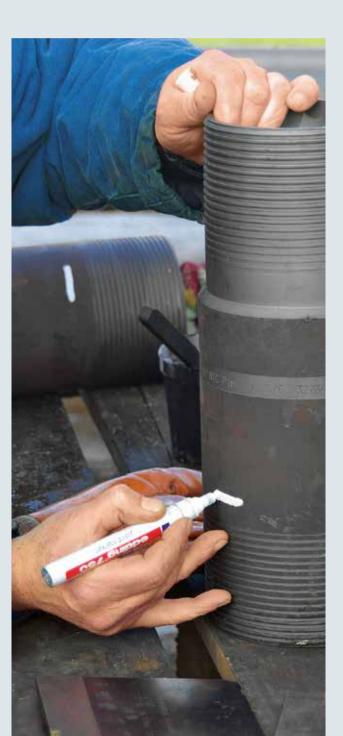
"In accordance with our conscientious audit and assessment, we confirm that 1. the statements of fact in the report are correct, 2. the consideration of the Company in the course of the transactions listed in the report was not unreasonably high or any detriments were offset, 3. the measures listed in the report are not the occasion for an assessment substantially different from that of the Management Board."

The Supervisory Board assessed the dependent company report provided by the Management Board and the audit report provided by the financial statement auditor. Following the final result of the Supervisory Board's own assessment of the dependent company report, it has no objections against the declaration of the Management Board in respect of the dependent company report.

The Supervisory Board thanks the members of the Management Board and all employees of Daldrup & Söhne AG and its affiliated companies for their personal contribution and commitment during the year under review.

Grünwald, 31 May 2019

Wolfgang Clement Chairman of the Supervisory Board



# DALDRUP & SÖHNE AG SHARES 2018 WEAKER THAN THE MARKET INDICES

Daldrup & Söhne AG shares started the stock market year 2018 with a price of EUR 12.60. A few days later the share reached its annual high of EUR 14.30. By the end of the year the share price had fallen to EUR 7.70. Daldrup shares ended the stock market year with a price of EUR 8.00. The share price thus fell by 36.5 % over the year as a whole (previous year: + 48 %).

After a dynamic start to the year, the 2018 stock market year was – the DAX reached a new all-time high of 13,559 points at the end of January – marked by high volatility and falling prices.

From mid-June onwords, the selection index lost around 20 % and reached its low for the year at 10,381 points at the end of December. The DAX closed the year with a loss of 18.3 % (previous year: + 6.9 %).

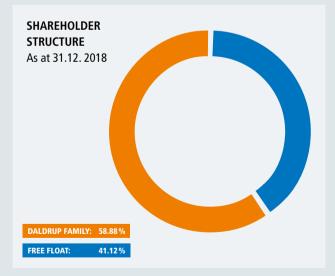
The TecDax lost 3.1 % (previous year: + 39.6 %). The sector-specific DAXsector All Industrial index which covers Daldrup & Söhne AG fell by 16.3 % (previous year: + 16.7 %) and the DAXsubsector All Renewable Energies by 36.1 % (previous year: -19.8 %).

The Scale30 selection index, which has been calculated by Deutsche Börse AG since 7 February 2018 and has counted Daldrup as a member since 19 March 2018, lost 29.2 %. Sales of Daldrup shares on XETRA, tradegate and the regional stock exchanges averaged 4,750 shares per day during the reporting period (previous year: around 5,050). Despite a higher free float, the market capitalization was at the end of the year at around EUR 48 million (previous year: EUR 64 million).

#### ANNUAL GENERAL MEETING APPROVES NEW AUTHORISED CAPITAL

At the Annual General Meeting on 29 August 2018, the shareholders voted by a large majority on the agenda items to be agreed. This particularly included the authorisation to purchase or use treasury shares, the creation of new authorised capital in the amount of EUR 2,994,750 and the authorisation to issue convertible bonds/ bonds with warrants attached until 28 August 2023 or profit participation rights/participating bonds with a total nominal value of up to EUR 50,000,000 with a maximum term of 15 years. 73 % (previous year: 72.6 %) of the registered capital of Daldrup & Söhne AG was present.

The latest valuations and price targets of the analyst firms Pareto Securities and SMC Research were EUR 14.50 and EUR 14.30, respectively. Analysts rated the share "buy" and "hold" respectively.



Investor relations work in the year under review focused in particular on regular discussions with investors and analysts as well as the presentation of the Daldrup Group's business model at capital market events such as the Equity Forum of Deutsche Börse AG. Daldrup also presented its drilling and geothermal know-how at on-site meetings at the power plant site in Taufkirchen, at the company headquarters in Ascheberg as well as in Grünwald and at industry-specific trade fairs.

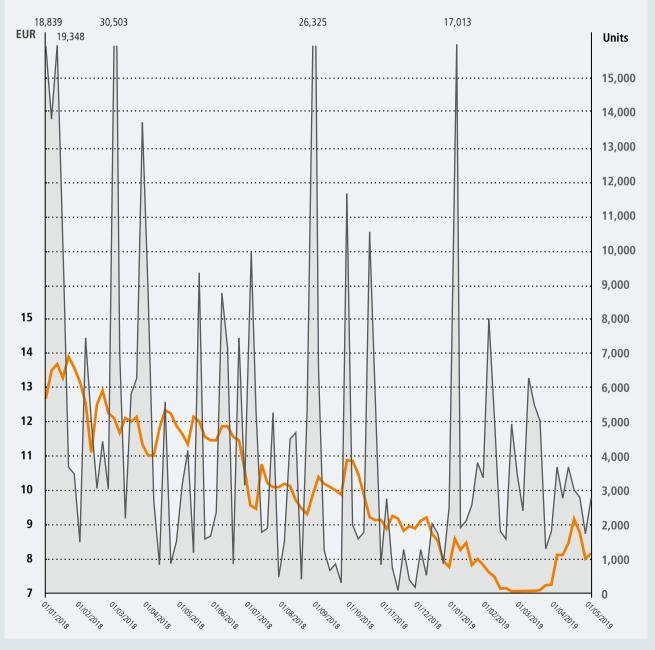


CHART DALDRUP & SÖHNE AG – Share and unit sales development 2018 to April 2019

• Share price of Daldrup & Söhne AG Unit sales of all German regional stock exchanges and trading platforms

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# **GROUP MANAGEMENT REPORT**

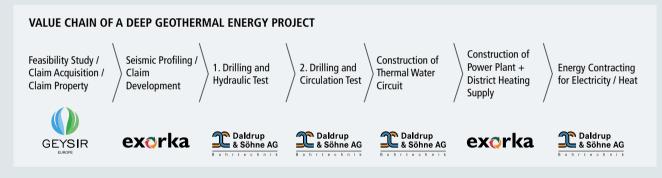
FOR THE FISCAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

# A. COMPANY -

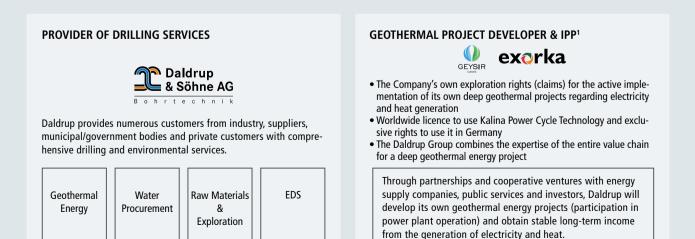
BUSINESS ACTIVITIES, COMPETITIVE POSITION AND ENVIRONMENT

# **1. GROUP STRUCTURE AND BUSINESS ACTIVITIES**

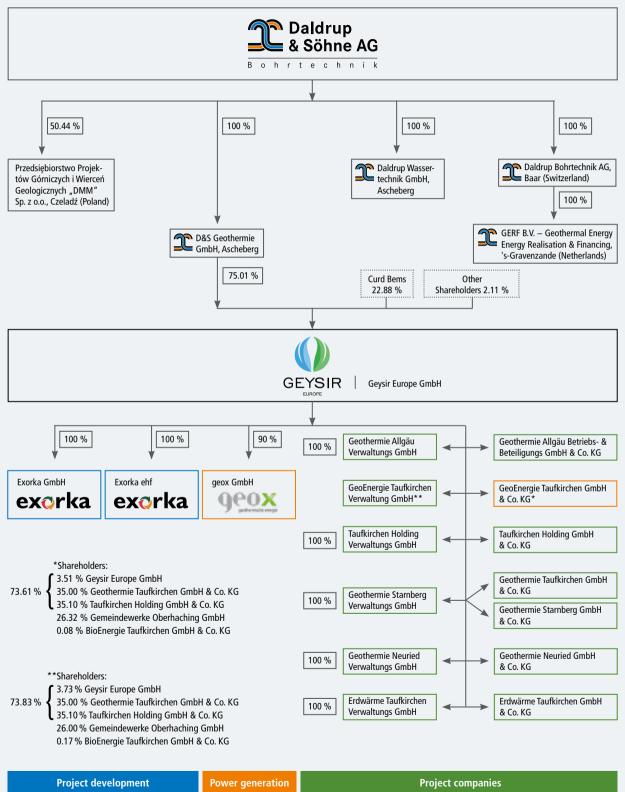
Daldrup & Söhne AG, a company whose history goes back decades, is one of the leading providers of drilling and environmental services, deep geothermal power plant projects and, through its Group companies, power plant operators in Germany and in Central Europe. The Company's activities are organised into the business units of Geothermics, Raw Materials & Exploration, Water Procurement as well as Environment, Development & Services (EDS). As a result of building up strategic investments and partnerships, Daldrup Group now occupies all positions in the value chain for geothermal projects. It holds permits for the exploration of geothermal energy in a particular area (claims), develops the claims through to drill readiness, executes the drillings, designs and constructs the power plants and takes care of energy contracting and power plant operations.



Daldrup Group's range of services enables it to offer turnkey geothermal energy power plant projects "from a single source".



#### **GROUP STRUCTURE AS AT 31/12/2018**





#### ORGANISATION

All Group companies are bound by rules of procedure and/or by catalogues of transactions requiring approval and are subject to the strategic orientation of the Daldrup Group.

#### **BUSINESS ACTIVITIES**

All services of the Daldrup Group are provided by two Group divisions. Group division I comprises the activities of Daldrup & Söhne AG with its direct equity investments. Group division II groups the activities of Geysir Europe GmbH and its direct subsidiaries. The Geysir-Europe Group forms a subgroup within the Daldrup Group.

The company operations of Daldrup & Söhne AG represent one business division including the Geothermal Energy, Raw Materials & Exploration, Water Procurement and Environment, Development & Services (EDS) business units. Group division II primarily includes the claims, the development company and/or the general contractor Exorka GmbH for purposes of developing new products through market launch. Division II also includes the interests in the power plants in Landau and Taufkirchen.

#### **Geothermal Energy**

The Geothermal Energy business unit provides drilling services for near-surface geothermal energy (particularly geothermal probes for heat pumps) but above all, drilling services for deep geothermal energy. The utilisation of deep geothermal energy requires drilling to depths of up to 6,000 metres so that the geothermal energy that then becomes accessible can be used for electricity and/or heat generation.

Geothermics is becoming increasingly important globally in terms of the generation of heat and electricity as a component of renewable energies within the overall energy mix. Particular preference here is given to countries that have high enthalpy deposits. High enthalpy deposits are sites in which high temperatures (over 200 °C) and/or pressures can be found at relatively shallow depths (< 2,000 m). In low enthalpy regions, however, such as Germany and its neighbouring countries, deeper wells and processes called binary power plant circulation processes are used to generate electricity from geothermal energy.



The direct use of geothermal energy for heating and cooling also offers very profitable opportunities. These include, for example, in the housing industry both new construction projects and the energy-efficient building renovation as well as commercial applications such as in greenhouses, fish farms, drying processes, etc. Reservoirs with thermal water temperatures that are lower than 110 °C and that generally require drilling depths of between 1,000 and 3,000 metres can be used in this manner. In addition to this, during the last few years in Germany the regulatory framework to promote the use of heat from renewable energy sources has continued to be extended and improved.

By measures which include the National Energy Efficiency Action Plan (NAPE) and the Buildings' Energy Efficiency Strategy (ESG), designed to enhance and strengthen existing laws and measures such as the Renewable Energies Heat Act (EEWärmeG), the Market Incentive Programme (MAP) and the Energy Saving Ordinance (EnEV). Further details of this can be found in Chapter 2, "Market and Competition".

The main focus of the Daldrup & Söhne AG German operations is currently in the Bavarian Molasse basin around Munich, the Upper Rhine Rift Valley, and at a later stage, in the North German Plain. During the 2018 fiscal year international activities particularly focussed on the Netherlands, Belgium, Switzerland and Poland. Beside these countries, there are specific options to expand business in Italy, which is likewise predestined for the deep geothermal energy. To such an extent, Daldrup & Söhne AG's activities across Europe will focus on sites with especially good geothermal energy potential and corresponding sales opportunities for electricity and heat.

Deep wells down to a depth of 6,000 metres represent a challenge for both employees and technology. Daldrup & Söhne AG has successfully drilled more than 10,000 wells in various geological formations during the course of the Company's history. Including the sinking of over 50 wells for deep geothermal projects. The Geothermal Energy unit's share of gross revenue generated by Daldrup & Söhne AG in 2018 reached 81 % (previous year: 50 %).

#### The Daldrup Group alternative risk transfer concept

Together with well-known partners of the insurance industry, Daldrup & Söhne AG has recently developed a risk transfer structure to hedge the exploration risks inherent in the preparation of deep geothermal projects. This mechanism, that is exclusively available to customers of Daldrup & Söhne AG, simplifies geothermal drilling and energy projects and enables the financing of geothermal projects even with a high proportion of borrowed capital. In addition to hedging exploration risks this structure comes with the added side effect of significantly reducing the equity requirements of the client at the scouting stage. For project developers and investors this therefore means that geothermal wells - including the initial well which entails the highest exploration risk - can be financed by way of bank loans right from the outset. Daldrup acts neither as a financier nor as an insurer in this context. The exploration risks are borne by third parties. The ART concept has proven to be an important instrument of customer and project acquisition in Central Europe and represents an unique selling point for the Daldrup Group.

#### **Raw materials & Exploration**

In the Raw Materials & Exploration business unit, Daldrup & Söhne AG carries out drilling operations on behalf of national and international mining companies for the exploration of deposits of fossil fuels (especially hard coal, oil and gas) as well as mineral raw materials (e.g., salts, ores, copper, nickel, zinc and limestone). Another major area comprises activities in respect of the exploration and securing of the substratum in mining areas. The share of the Daldrup Group revenue generated in 2018 by this business unit amounts to 12 % (previous year: 22 %).

#### Water Procurement

The Water Procurement business unit represents the entrepreneurial origins of Daldrup & Söhne AG. It includes drilling wells to obtain drinking water, process water, thermal and mineral water, boiler feedwater and cooling water as well as thermal brine. Alongside the actual drilling, Water Procurement also uses a number of special building techniques; from stainless steel piping supplying drinking and mineral water to the professional development of well systems, right through to the installation of modern filtration and pump systems. In global terms, water is an expensive commodity in short supply. Water management will therefore be of major importance in future. The water distribution networks of the industrialised nations are often dilapidated. A large proportion of the world's population has no access to supplies of drinking water and drink waste water that has been inadequately treated. The share of the Daldrup Group revenue generated by the water procurement business unit amounts to 3 % (previous year: 16 %) for 2018.

#### EDS

The fourth business unit, EDS, brings together special environmental technology services for a broad range of clients. Daldrup & Söhne AG's expertise has been repeatedly demonstrated in relation to the hydraulic remediation of contaminated sites, the planning and construction of gas extraction wells for obtaining landfill gas, the provision of groundwater quality measurement points or the construction of water purification plants. The EDS business unit contributed a 4 % (previous year: 12 %) share to the Daldrup Group revenue generated during the 2018 fiscal year.

In addition to the planning and construction of geothermal power plant projects, the second division also handles their operation. In future, this division will only support projects that involve mediumsized companies and in which reliable standard components are installed that enable the power plant to be commissioned quickly and have been tried and tested over the long term.

#### Taufkirchen geothermal power plant

The Taufkirchen power plant has been supplying heat since the end of 2015, which is fed into the district heating networks of local customers in a regular manner. Comprehensive component and cycle tests were successfully completed with the evaporator in the first guarter of 2018, and electricity from the power plant was fed into the public grid. Towards the end of the third guarter of the 2018 fiscal year, it became apparent that more detailed overall coordination of the power plant, including the circulation system and the cooling units in particular, was required for the call-off of the second evaporator as part of output level II. As a result, electricity production could not be carried out as originally planned. Management engaged an external consulting firm in the fourth guarter of the 2018 fiscal year in order to support the Group's general contractor Exorka GmbH. The transition of the power plant to the second power stage is forecasted for the beginning of 2020. The power plant will then generate around 35 MW thermally and approx. 4.3 MW electrically.

#### Landau in der Pfalz geothermal power plant

The second geothermal power plant project was opened by Daldrup in August 2013 with an initial stake of 40 % in the existing geothermal power plant Landau in the Palatinate. Between 2015 and 2017 the power plant was extensively adapted to the current technical standard in terms of safety and economical operation in coordination with the authorities. Since the fourth quarter of 2017, the power plant has supplied electricity again, which was fed into the electricity grid of the local provider as part of EEG support. The power plant again produced with very satisfactory results after completion of the new maintenance work carried out in close consultation with the authorities during the period from September to November 2018. Opportunities for optimisation that were recognised were implemented quickly. Following the termination of legal disputes with Pfalzwerke Aktiengesellschaft, the Daldrup Group now holds 90 % of the shares in geox GmbH as of the end of the 2017 fiscal year. A further 10 % was acquired in January 2019 as part of the call option contractually agreed at the time, so that Geysir Europe GmbH has held 100 % of Geox GmbH since January 2019. The power plant, equipped with ORC-technology has a capacity of max. 3.6 MW for electricity and max. 7 MW for thermal energy.

#### Neuried geothermal power plant

Daldrup & Söhne AG continues to stick to its plan to build the Neuried geothermal power plant. This plant is intended to supply electricity and heat. Heat can also be provided to supply local industry or residential property if required. The Geysir Europe GmbH had already received an approval for the execution of geothermal drilling against, which was countered with a law suit by the city of Kehl. In the first quarter of 2017, the Administrative Court dismissed the lawsuit against the state of Baden-Württemberg against the mining law approval of the main operating plan for the four planned geothermal wells. However, due to this lawsuit filed with the Freiburg Administrative Court, the development of the project did not make much progress. The temporary approvals granted in the course of the intervening lawsuit were re-applied for and examined in a new procedure. The exploration permit has since been issued.

#### **Geothermal heating plant Puchheim**

Together with the city of Puchheim near Munich, The Daldrup Group plans to build a heating plant with a thermal output of around 4.5 MW. The permitted field is geologically also in the Bavarian Molasse basin. The expected water temperatures between 80 and 85 °C are well suited for heat recovery. A supply contract was concluded with Bayernwerk Natur. The project is beneficial for the municipality of Puchheim, as alternative sources of energy such as hydroelectricity and wind power can only be expanded to a limited extent due to the natural conditions on site. At its meeting on 23 April 2018, the city council of Puchheim allowed both a referendum and a council proposal for geothermal energy. In the context of the citizen's petition, the citizens of Puchheim decided against participation in the heating plantby the municipality. The Daldrup Group will nevertheless continue to pursue construction of the heating plant together with another investor if necessary.

The experience derived from the four business units have consistently resulted in refinement of drilling know-hows and the training of young and new employees. In addition, employment fluctuations in the operation of major installations can be absorbed by staff pooling. An average of 157 employees were employed by the Daldrup Group in 2018 (previous year: 147). This does not include one trainee (previous year six trainees). In addition to this, other companies made up to about 40 further employees available to Daldrup & Söhne AG on a project-by-project basis.

# 2. MARKET AND COMPETITION

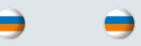
Daldrup & Söhne AG has an unconditionally solid market and competitive position in all its business areas. Daldrup & Söhne AG is currently operating in an overall attractive environment with, however, high competition. The Group has numerous reference sites in continental Europe with drilling depths of up to 6,000 metres.

High technical, financial and increasing official/administrative market entry barriers as well as the limited availability of qualified drilling capacities of companies with sufficient experience with geothermal drilling and the limited number of drilling rights in Germany support the strong market position enjoyed by Daldrup & Söhne AG. In addition, the Company has a healthy order book in all business units, which guarantees high capacity utilisation and planning security well into the 2020 fiscal year.

Geothermal energy is a renewable energy source that can be used on a continual basis, compared to wind and solar energy that have fluctuating availability. Therefore, according to the Federal Ministry for Economic Affairs and Energy (BMWi) in Germany, it has an important role to play as part of a renewable energy mix in order to cover the basic requirements and gaps in energy supply. Overall, geothermal energy use has significant potential which can theoretically be used to cover the German energy needs many times over. Currently, power generation by means of deep geothermal energy is even more expensive than comparable renewable energy sources.

Through the Renewable Energy Sources Act (EEG), the German Federal Government continues to promote geothermal plants for the generation of electricity. The EEG offers a great deal of planning and investment security through fixed remuneration rates and a 20-year remuneration period plus the year of commissioning. There is an entitlement to feed-in tariffs or sponsored direct marketing for the electricity generated and with respect to the relevant grid operator (power supply company) or the direct marketing company. This is enshrined in the Renewable Energy Sources Act (EEG) 2017. Moreover, the geothermal industry remains exempt from the tendering procedure intended for wind and solar projects. The feed-in tariffs for electricity will be at 25.2 cent/kWh for the next 20 years for plants that have been approved under mining law by 31/12/2019 and put into operation by 31/12/2022. The production of deep geothermal energy units to generate electricity and/or heat also receives additional support through the German Market Incentive Programme. Research funding also plays an important part in the deep geothermal energy sector. For additional information on this, please refer to chapter 5, "Research and Development".

Electricity production from deep geothermal energy is still a relatively young niche market in Germany. The efficient supply of electricity can be generated with temperatures in excess of 110 °C. In practice, two technical power plant processes are used: the Kalina technology and the ORC technology. The advantages of the Kalina technology lie in the slightly higher economic efficiency of the process, on the other hand the Kalina technology is more demanding in terms of control in daily practice. According to the German Federal Geothermal Association (BVG), deep geothermal power plants in Germany have an installed output of 37.1 MW (previous year: 34.8 MW). There are currently 37 (previous year: 36) deep geothermal power plants in operation, the vast majority of which are hydrothermal. In addition to the electrical output they generate a thermal capacity of 336.5 MW (previous year: 315.4 MW). A further 33 (previous year: 32) deep geothermal energy projects are currently under way or in the planning stages. Unlike deep geothermal energy, near-surface geothermal energy (drilling depth up to 400 m) has already achieved greater market penetration. The BVG estimates that around 390,000 units (previous year: around 370,000) e.g. geothermal energy probes or collectors in conjunction with heat pumps are in operation and provide approximately 4,300 MW. In 2018, more than 23,000 new units were installed. For Germany, the association assumes an installed geothermal thermal capacity of approx. 4,600 MW and an installed geothermal electricity capacity of 34.83 MW from deep and near-surface geothermal energy.



The importance of geothermal energy for heat supply and power generation is increasing worldwide. According to surveys by IRENA (International Renewable Energy Agency), geothermal energy installed at the end of 2018 amounted to 13.3 GW worldwide (previous year: 12.8 GW). This represents an increase of 33 % compared to 2010. The largest increase in geothermal output was mainly due to countries in high-enthalpy regions such as Indonesia (+ 137 MW), Turkey (+ 219 MW) and Iceland (+ 45 MW). With thermal power, geothermal plants with a total of 70,270 MW are installed worldwide.

While, according to the IEA (International Energy Agency, Market Report Renewables 2018), the majority of geothermal energy is used to heat water (45 %) and space (34 %), agriculture (above all for heating greenhouses) has long been an important end consumer sector in some countries. In recent years, the energy-intensive greenhouse sector in the Netherlands has expanded geothermal use due to strong political support. After China, Turkey and Japan, the Netherlands has thus become the fourth largest user of geothermal heat in the agricultural sector. Newer geothermal heating concepts concentrate primarily on the production and distribution of local and district heating.

The limited availability of drilling capacity and the limited possibilities of developing this capacity are continuing to be in high demand. This results in stable drilling prices and sometimes intense competition. As well as the few specialised geothermal drilling companies, particular competitors in the area of deep geothermal wells include drilling companies that are primarily engaged in the oil and gas business and occasionally participate in invitations to tender for geothermal projects. In times of rising crude oil prices, competition tends to decline as lower drilling capacities of the oil and gas industry are offered in the market.

The German government is committed to the move towards alternative energy. The last nuclear power plant will be removed from the grid in Germany in 2022 and  $CO_2$  emissions must be reduced by at least 50 % (base year 1990) by 2030. The share in renewable energy in terms of German gross electricity consumption showed a significant increase in 2018 to 37.8 % (2017: 36.0 %). At 225.7 billion kWh the generation of electricity from renewable energy sources was significantly higher compared to the previous year (216.3 billion kWh). In 2018, record levels of solar radiation in particular led to a further increase in electricity generation from renewable sources. Renewable energies have thus consolidated their status as one of the most important source of power. However, further dynamic growth and a conducive market environment are both necessary if the target of 40 % to 45 % of gross electricity consumption is to be met by 2025. The importance of electricity generation from geothermal energy in Germany remains low, but is trending upward, as the table on installed capacity shows according to preliminary data from the Working Group on Renewable Energies, geothermal energy generated 172 million kWh of electricity, about 5.5 % more than in the previous year (163 million kWh). However, geothermal energy still accounts for less than 0.1 % of total gross electricity consumption in Germany.

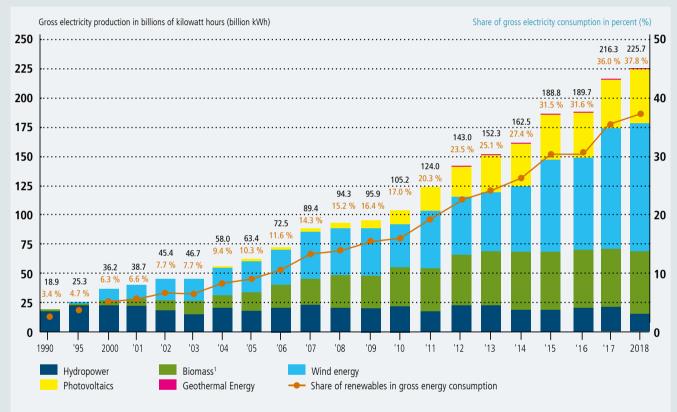
# INSTALLED CAPACITY FOR ELECTRICITY GENERATION FROM GEOTHERMAL ENERGY IN GERMANY

YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MW	0	3	3	8	8	8	19	30	33	34	39	39	42

Source: Renewable energy sources in Germany, data on the development in 2018, Federal Environment Agency, March 2019

According to the Federal Environment Agency, electricity production from geothermal energy increased by 5.5 % to 172 GWh in 2018 compared with 2017. The share of geothermal energy in gross electricity consumption (based on total gross electricity consumption in 2018: 597.5 KWh, 2017: 601.3 KWh) of remained unchanged at around 0.03 %.

#### DEVELOPMENT OF POWER GENERATION FROM RENEWABLE ENERGY SOURCES

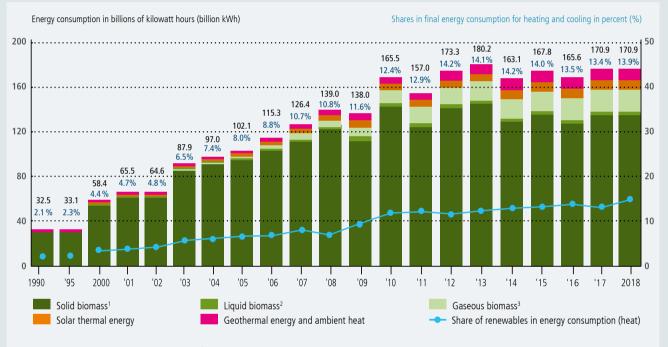


<sup>1</sup> including solid and liguid biomass, biogas, biomethane, landfill gas, sewage gas, sewage sludge and the biogenic fraction of the waste

Source: Working Group Renewable Energy Statistics (AGEE-Stat)

Heat continues to have the highest impact in Germany in terms of energy consumption. According to the German Federal Environment Agency, around 50 % of the total final energy consumption (electricity, heating, mobility) is used for generating heat. It is used in many ways, for space heating/air-conditioning, for hot water and process heat/refrigeration.





#### ENERGY CONSUMPTION FOR HEAT FROM RENEWABLE ENERGIES 1990 - 2018 IN BILLION KWH IN GERMANY

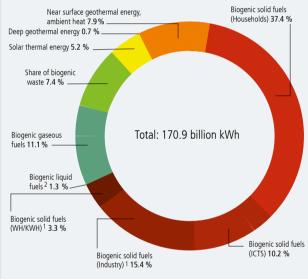
<sup>1</sup> incl. sewage sludge and biogenic share of waste <sup>2</sup> incl. Biofuel consumption in agriculture, forestry, construction and military <sup>3</sup> Biogas incl. biomethane, sewage and landfill gas

Source: Renewable energy sources in Germany, data on the development in 2018, Federal Environment Agency, March 2019

The final energy consumption for heat from renewable energies in 2018 remained unchanged from the previous year at 170.9 GWh. The share of renewable heat increased slightly by 0.5 percentage points to 13.9 %. From geothermal energy sources (deep geothermal energy, near-surface geothermal energy and ambient heat), a total of 14,684 GWh (previous year: 13,610 GWh) of heat was used in 2018, which represents an increase of 7.9 %. In terms of total heat consumption from renewable energy sources, the share of geothermal energy is slightly higher than the previous year at 8.6 % (previous year: 8.0 %).



# FINAL ENERGY CONSUMPTION FOR HEAT FROM RENEWABLE ENERGY SOURCES IN GERMANY IN 2018



<sup>1</sup> incl. sewage sludge

<sup>2</sup> incl. biodiesel consumption for agriculture and forestry, construction industry and military

Source: Renewable energy sources in Germany, data on the development in 2018, Federal Environment Agency, March 2019

# 3. STRATEGY, OBJECTIVES AND CORPORATE MANAGEMENT

The purpose of Daldrup & Söhne AG, as parent company of the Daldrup Group, is to expand geothermal energy in order to provide European consumers and the industrial sector with competitive access to climate-friendly, geothermal energy sources as an alternative to fossil primary energy sources.

Daldrup & Söhne AG wants to grow sustainably and intends to expand its leading market position in Germany and Europe as an experienced drilling technology specialist. In addition, the company intends in future to be involved in economically feasible geothermal power plant projects to generate constant revenue from supplying the grid and the sale of heat and electricity through feed-in tariffs and/or direct marketing premiums of the EEC. In the future, however, projects with a local character and medium-sized character will primarily be supported.

For the further development of the Group, it is of particular importance that the strategy process initiated be driven forward more consistently in terms of sales, project organisation and finance. This is intended to sustainably improve the earnings and liquidity situation of the Group and ensure the corresponding economic stability.

In order to master the challenges of the future, the Daldrup Group, whether in sales, administration or production, will reposition itself in order to be sustainably successful in all areas of the company and group. For this reason, further organisational changes will also be necessary in future in order to align the Group towards its future goals. Both internal processes and the management and monitoring of drilling projects as well as investments and future projects will be in focus looking ahead.

# 4. LONG-TERM EQUITY INVESTMENTS AND STRATEGIC PARTNERSHIPS

Daldrup & Söhne AG holds the following investments as at 31 December 2018:

#### Daldrup Bohrtechnik AG, Baar (Switzerland)

Daldrup Bohrtechnik AG operates independently within the interesting Swiss market. In addition to wells for the exploration of geothermal energy, special wells, for example, for brine production and depth storage discovery are of particular interest. The necessary drilling technology and qualified operators are provided, as needed, by Daldrup & Söhne AG.

# GERF – Geothermal Energy Realisation and Financing B.V., 's-Gravenzande (Netherlands)

The use of geothermal energy as a resource-conserving energy source is being well received by large greenhouse operators (vegetables, flowers, plants) in the Netherlands. The Dutch Ministry of Economics and the regional provinces are supporting this development through a programme of subsidies for investment in self-sustaining geothermal heating plants. Daldrup has had a presence in the Netherlands since 2011 through its representative office GERF – Geothermal Energy Realisation and Financing B.V.

# Przedsiębiorstwo Projektów Górniczych i Wierceń Geologicznych "DMM" Sp. z o.o., Katowice (Poland)

Daldrup & Söhne AG holds 50.44 % of shares in the Polish company "Przedsiębiorstwo Projektów Górniczych i Wierceń Geologicznych "DMM" Sp. z o.o." (project company for mining and geological drilling activities) set up in 2012 by two Polish partners for the acquisition and execution of drilling activities (in the coal mining sector, for the shale gas business and the exploration of minerals). The company operates within larger exploration projects of the hard coal mining industry and has established itself in the Polish market, including for flat geothermal and exploratory drilling projects. The company combines the geological knowledge, technical equipment and professional staff of the group of shareholders.

#### Daldrup Wassertechnik GmbH, Ascheberg

During the fiscal year, Daldrup & Söhne AG continued to consider outsourcing business activities regarding Water Procurement to Daldrup Wassertechnik GmbH. Plans regarding this are currently on hold. The vast majority of company employees thus largely work for Daldrup & Söhne AG.

### D&S Geothermie GmbH, Grünwald

The main investment activities of Daldrup & Söhne AG are combined together as D&S Geothermie GmbH. As at 31 December 2018, 75.01 % of the capital shares of Geysir Europe GmbH with its national and international subsidiaries are held here. The operational project planning and development company trades under the Exorka brand. The regional geothermal projects in their different development phases and the licences are grouped together in the existing subsidiaries. In order to retain the freedom to restructure Division II, a further 22.8 % of Geysir Europe GmbH was acquired at the beginning of March 2019.

# **5. RESEARCH AND DEVELOPMENT**

Generally speaking, there are three types of heat extraction from underground in the area of deep geothermal energy:

#### • Deep geothermal energy probes:

Closed circuit within a U tube or a coaxial probe with a circulating heat transfer medium (e.g. geothermal energy project for electricity plants for the city of Zurich, Switzerland, in the Triemli District).

#### • Hydrothermal systems:

Closed circuit in which thermal water is pumped from production wells and fed back into natural aquifers via re-injection wells.

#### • Petrothermal systems:

(or EGS = enhanced geothermal systems): Open or closed circuit where hydraulic stimulation measures are used to generate or enhance fissures and gaps in the dry subsoil, through which artificially introduced/injected water is able to flow.

While Daldrup has successfully executed the first two systems and taken the projects into operation on several occasions, there is no petrothermal geothermal energy project in regular operation in Europe. There is still only one EU research project in Alsace and one project in Groß-Schönebeck at the GeoForschungszentrum Potsdam.

The Daldrup Group continues to regard itself as a technological pioneer in deep geothermal energy and also intends to take up the technical challenges presented by petrothermal geothermal energy of EGS in future.

# 6. OVERVIEW OF BUSINESS DEVELOPMENT

According to the Kiel Institute for the World Economy (IfW) in its economic forecast published in March 2019, the German economy shifted down a gear in the year under review. After the economic momentum in Germany was extremely high until the middle of last year, production slowed noticeably in the second half of the year. The deterioration in business prospects was due not least to the foreign trade environment, which was marked by a high degree of political uncertainty. This is weighing on companies' willingness to invest and has slowed economic momentum despite the fact that capacity utilisation remains quite high. Production was also hampered by capacity bottlenecks due to a shortage of skilled labour and material and equipment. The economic experts assume a growth of 1.4 % in the 2018 gross domestic product (previous year: 2.2 %).

According to Kiel economic experts, the economy in the euro zone declined again in 2018. The economic slowdown in the year under review is mainly attributable to weaker stimuli from the international environment and, to a lesser extent, to country-specific temporary special factors. Nevertheless, overall economic production continued to grow moderately, as the economy continued to be supported by low interest rates and a slightly expansive financial policy. The economic experts assume a growth of 1.8 % in the 2018 gross domestic product in the euro zone (previous year: 2.5 %).

#### HIGH DEMAND FOR GEOTHERMAL ENERGY

In the year under review, the environment for geothermal projects in Germany continued to be characterised by high, constant demand. This was largely due to the fact that the framework conditions provided by the EEG 2017 will remain stable in the foreseeable future. What this means for investors is that planning and legal security are guaranteed for the next few years. Particularly in respect of the typically lengthy implementation periods for geothermal projects, there must be no doubt for investors once the remuneration provided for by current law shall also apply during the commissioning of a plant. The feed-in tariffs for geothermal electricity will remain at 25.2 cent/kWh for plants that have been approved under mining law by 31/12/2019 and put into operation by 31/12/2022. The eligibility period remains unchanged at 20 years and the feed-in tariffs will start to decline from 2021 onwards. Moreover, the geothermal industry remains exempt from the usual tendering procedure intended for wind and solar projects.

This framework and generally positive experiences have also indirectly contributed to a greater willingness of banks to make financing available for projects. Also, major infrastructure investors are showing an interest in power plant projects which they can acquire on a turnkey basis from Daldrup & Söhne AG. In the region around Munich in particular, local authorities and municipal companies are also making an appearance as customers. These municipalities rely on climate-friendly, decentralised energy supply based on local resources. The performance limiting factors in the drilling and project business in 2018 were, as is customary in the industry, lengthy tendering and approval procedures for drilling projects as well as bottlenecks in the availability of drilling teams and equipment.

Taking this market environment into account, the Daldrup Group managed to achieve revenues of EUR 38.9 million (previous year: EUR 24.8 million) and an overall performance of EUR 34.9 million (previous year: EUR 43.0 million) during the 2018 fiscal year. The following contributions to revenue were made by the individual business units of Daldrup & Söhne AG:

<ul> <li>Geothermal Energy:</li> </ul>	EUR 31.6 million	(81.2 %)
• Raw Materials & Exploration:	EUR 4.8 million	(12.3 %)
• EDS:	EUR 1.4 million	(3.6 %)
Water Procurement:	EUR 1.1 million	(2.9 %)

Revenues of 32 % (previous year: 85 %) were generated in Germany, 68 % (previous year: 15 %) in other EU countries (Netherlands, Belgium, Poland) for 2018. The order situation was good at the end of the financial year in terms of drilling installations for medium-depth drilling in Germany, Poland and Switzerland. Deep geothermal wells were initiated and/or drilled by Daldrup in Germany, the Netherlands and Belgium.

Despite the continuing high demand in an attractive market environment, the Daldrup Group posted a significant EBIT loss of EUR 16.3 million. The negative EBIT result was due in particular to unexpected project losses from operating business and downtime costs for drilling rigs as well as one-off valuation adjustments for work in progress. The losses incurred in 2018 and the lack of contribution margins were caused, among other things, by frequent conversions in a major project due to the threat of penalties for late commissioning, costs not contractually recoverable from major customers in connection with a loss event and costs for the repair of the loss. In addition, price increases for 2017 could only be renegotiated at the beginning of 2019 due to lengthy price negotiations. Furthermore, a drilling site could not be constructed as planned at the beginning of the 2018 fiscal year due to a failure to supply it with special asphalt. To this end, the Company is currently investigating the possibility of bringing an action against the supplier. This results in a drilling delay of around four months or a further loss of contribution margin. In addition, a project was planned for the second half of 2018. The delay also led to a contribution margin loss. However, this delayed start cannot be invoiced to the customer. The contract has just begun. The Power Plants division also posted a loss. This resulted from the maintenance of the Landau power plant in the second half of the year and the electricity production at the Taufkirchen power plant in 2018 that did not proceed as scheduled.

Overall, therefore, the 2018 fiscal year fell well short of the sales and earnings expectations both in terms of the actual development and the comparison with the overall planning. Business performance and the progress made in implementing planned measures did not lead to a satisfactory result by the end of the year. Due to the effects described above (project losses and shutdown costs), the Daldrup Group will have to absorb a consolidated loss of EUR 18.5 million in 2018 after almost breaking even in 2017.

# B. RESULTS OF OPERATIONS, NET ASSETS AND FINANCIAL POSITION

### **1. RESULTS OF OPERATIONS**

#### THE RESULTS OF OPERATIONS OF THE DALDRUP GROUP ARE DESCRIBED BELOW:

INCOME STATEMENT	2018 EUR k	2017 EUR k
Sales	38,938	24,758
Total output	34,908	43,044
Other operating income and tax refunds	1,667	2,378
Cost of materials	29,135	21,804
Personnel expenses	8,417	8,507
Amortisation of intangible fixed assets and depreciation of property, plant, and equipment	3,880	3,604
Other operating expenses	11,563	10,367
EBITDA	- 12,421	4,743
EBIT	- 16,300	1,139

The value creation and production process for this Group division, which is typical of the industry and project-dependent, requires regular measurement of work in process. In accordance with the principle of prudence, deductions for calculated risk, profit and sales costs are made from the earned value achieved. These income components are therefore not implemented until after completion, approval and final billing of a project. Project and operating costs, however, are recognised immediately they are incurred. The income statement for Daldrup & Söhne AG is thus characterised by the fluctuating project business over time. As the sales revenue only presents an incomplete picture of the performance during the fiscal year due to the long-term project agreements, the overall performance has also been included.

The total out generated during the 2018 fiscal year consists of sales revenues amounting to EUR 38.9 million (previous year: EUR 24.8 million) and reductions in inventories amounting to EUR 4.0 million (increases in inventories: EUR 18.3 million).

Other operating expenses amount to EUR 1.5 million (previous year: EUR 2.3 million). This mainly comprises income from the reversal of provisions (EUR 0.82 million).

The cost of materials continues to include a high proportion of purchased services from third parties (e.g. borehole measurements, directional drilling services, mud service and purchased personnel services). Due to the aforementioned factors regarding project losses and shutdown costs, it rose to EUR 29.1 million in the reporting period (previous year: EUR 21.8 million) and reached unsatisfactory levels. Based on the overall performance, the gross revenue amounted to an unsatisfactory 16.5 % (previous year: 49.3 %).

Personnel expenses fell moderately to EUR 8.4 million (previous year: EUR 8.5 million) despite the higher number of employees compared with the previous year. The average headcount within the Daldrup Group in fiscal year 2018 rose slightly to 157 employees (previous year: 147 employees). Other operating expenses rose by 11.5 % to EUR 11.6 million (previous year: EUR 10.4 million) due to the extensive business volume. The costs include items such as the hire of necessary drilling equipment, residue and waste disposal, insurance premiums (especially to hedge the exploration risk), consultancy costs as part of the planning for the geothermal energy heating power plant, travel expenses and logistics costs incurred as a result of the mobilisation and demobilisation of drilling rigs. At EUR 0.65 million, losses from value adjustments and losses on receivables were again lower than in the previous year (EUR 0.70 million).

Scheduled depreciation increased moderately to EUR 3.9 million (previous year: EUR 3.6 million). Capital expenditure on property, plant and equipment was slightly below the previous year's level and mainly related to the drilling rig fleet and the vehicle fleet. The deep drilling rigs are depreciated on the basis of an average useful life of 15 years and thus written down using the same useful life as had been applied in the previous year.

Daldrup & Söhne AG's EBIT (earnings before interest, taxes on income and profit and extraordinary result) was an unsatisfactory EUR - 16.3 million (previous year: EUR + 1.1 million). This corresponds to an EBIT margin in relation to the gross revenue (percentage of EBIT to overall performance) of - 46.7 % (previous year: 2.7 %).

The consolidated financial result amounts to EUR - 2.1 million (previous year: EUR - 1.1 million). The decline results from the credit-financed takeover of the shares in the power plant company GeoEnergie Taufkirchen GmbH & Co. KG at the beginning of the 2018 fiscal year. From today's perspective, the Group expects a refund of taxes on income of around EUR 0.2 million (previous year: EUR 20k).

SUBGROUP EARNINGS in EUR k	2018	2017
Daldrup & Söhne AG	- 12,741	479
Daldrup Bohrtechnik AG, Switzerland	640	503
Daldrup Wassertechnik GmbH	14	7
"DMM" Sp. z o.o., Poland	163	- 50
D&S Geothermie GmbH	47	45
GERF BV, Netherlands	- 1,279	- 229
Geysir Europe GmbH (subgroup)	- 5,387	- 1,065
Consolidating Entries	1	330
Group Earnings	- 18,542	20

As a result of the factors described above, the Daldrup Group fell short of the Group target of EUR 40 million in total output with reported revenues of EUR 34.9 million. With EBIT of EUR - 16.3 million, the Group also fell well short of the Group EBIT forecast of 2 % to 5 % of total Group operating performance.

# 2. NET ASSETS

#### OVERVIEW OF THE NET ASSETS OF THE DALDRUP GROUP

ASSETS	31/12/2018 EUR k	31/12/2017 EUR k
A. Fixed Assets		
I. Intangible assets	2,768	692
II. Property, plant and equipment	112,893	35,845
III. Financial assets	991	23,021
B. Current Assets		
I. Inventories	7,383	22,583
II. Receivables and other assets	14,935	17,834
III. Liquid funds	2,426	1,464
C. Prepaid Expenses	68	44
D. Deferred Tax Assets	300	232
Balance Sheet Total	141,765	101,716

LIABILITIES	31/12/2018 TEUR	31/12/2017 TEUR
A. Equity		
I. Subscribed capital	5,985	5,441
II. Capital reserves and retained earnings	36,891	30,792
III. Equity difference from currency translation	- 1,248	- 1,175
IV. Consolidated net retained profits/Consolidated net retained loss	- 6,049	11,106
V. Minority interests	19,208	- 59
B. Difference arising from capital consolidation	1,724	0
C. Special item for grants and allowances	121	121
D. Provisions	4,971	6,216
E. Liabilities		
I. Liabilities to banks	10,993	14,523
II. Advance payments received on orders:	955	0
III. Trade payables	9,585	8,483
IV. Advance payments received on orders:	0	50
V. Other liabilities	53,743	25,396
F. Deferred Income	3	15
G. Deferred Tax Liabilities	4,883	807
Balance Sheet Total	141,765	101,716

The total assets of the Daldrup Group amounted to EUR 141.8 million as at the balance sheet date 31/12/2018 (previous year: EUR 101.7 million) in light of the full consolidation of all activities related to the Taufkirchen power plant. The Group's fixed assets of EUR 116.7 million (previous year: EUR 59.6 million) include prepayments made on assets under construction at the Taufkirchen power plant in the balance sheet item, as well as the drilling rigs, vehicle fleet and necessary operating and office equipment thereafter. Also in connection with the full consolidation of all power plant activities, financial assets fell significantly to EUR 1.0 million (previous year: EUR 23.0 million).

At EUR 3.0 million (previous year: EUR 3.1 million), the value of raw materials, consumables and supplies in current assets was at the same level as in the previous year. The inventories thus correspond to the proven inventories of the operative drilling operations. In view of suppliers' ability and readiness to deliver, it is not necessary to hold a larger inventory.

Work in progress, valued according to commercial prudence, fell significantly from EUR 81.2 million in the previous year to EUR 25.4 million. The reason for this is the first-time full consolidation of the Taufkirchen power plant; this results in a reduction in work in progress in the balance sheet and at the same time an increase in plants under construction. As of 31 December 2018, only partially completed orders from the original drilling business are now shown in the balance sheet item. Advance payments received totaling EUR 21.1 million (previous year: EUR 67.4 million – mainly due to advance payments for the Taufkirchen power plant) were openly deducted from work in progress.

Receivables and other assets amounted to EUR 14.9 million on the reporting date (previous year: EUR 17.8 million). The increase in trade receivables to EUR 4.3 million (previous year: EUR 3.2 million) is a welcome development, as it reflects the inflow of liquidity from operating activities at the beginning of the 2019 fiscal year. The receivables from the, on the whole, solvent claim base are intact. Other assets decreased to a total of approx. EUR 10.6 million (previous year: EUR 14.4 million), mainly because J.D. Apparate- und Maschinenbau GmbH had settled receivables of EUR 3.0 million at the balance sheet date. The reduction in receivables results from the assumption of an offset loan in the same amount. Liquid funds (cash in hand/bank) are EUR 2.4 million as at the reporting date (previous year: EUR 1.5 million).

On the liabilities side of the balance sheet, the Daldrup Group's equity increased to a total of EUR 54.8 million as at 31 December 2018 (previous year: EUR 46.1 million). Equity includes consolidation-related capital shares from external investors totalling EUR 19.2 million (previous year: EUR - 60k). Due to the consolidated net loss of EUR 18.5 million and the increase in total assets, the equity ratio fell to 38.6 % as of the balance sheet date (previous year: 45.3 %). Despite the unsatisfactory development in the past fiscalyear, the equity ratio thus exceeds the average value of medium-sized companies in the same employee size classes.

The provisions for pensions (previous year: EUR 0.9 million) were fully utilised in the year under review, as the pension recipient received a one-off capital payment. Other provisions decreased to EUR 4.8 million (previous year: EUR 5.2 million). The amount includes outstanding supplier invoices of approximately EUR 0.7 million as of the balance sheet date.

As a result of the acquisition of further shares in the power plant operating company GeoEnergie Taufkirchen GmbH & Co. KG and the resulting full consolidation, liabilities rose significantly to EUR 75.3 million (previous year: EUR 48.5 million), as the acquisition of the shares was predominantly credit-financed. Liabilities to banks were further reduced as planned to EUR 11.0 million (previous year: EUR 14.5 million). The bank loans include loans from the house banks of approx. EUR 0.3 million as well as the use of short-term working capital, time deposit loans and a medium-term credit line totalling EUR 9.2 million (previous year: EUR 12.8 million). The loans are secured by a drilling rig in accordance with banking practice and have since been fully repaid. Trade payables increased to EUR 9.6 million (previous year: EUR 8.5 million). The increase in other liabilities to EUR 53.7 million (previous year: EUR 25.4 million) is mainly due to the credit-financed acquisition of shares in the operating company Taufkirchen GmbH & Co. KG, which was granted at the beginning of the 2018 fiscal year by an investment company essentially against the pledging of the acquired shares and on the basis of compliance with the balance sheet and income statement ratios agreed in the credit agreement. The financing period is 15 years.

# **3. FINANCIAL POSITION**

Daldrup & Söhne AG manages the operating liquidity of the Group and, if necessary, provides the Group companies with sufficient liquidity.

The following abbreviated cash flow statement shows the Financial Position of the Daldrup Group:

### THE FOLLOWING ABBREVIATED CASH FLOW STATEMENT SHOWS THE FINANCIAL POSITION OF THE DALDRUP GROUP:

CASH FLOW STATEMENT	2018 EUR k	2017 EUR k
Group annual net income	-18,542	20
Depreciation and amortisation and write-downs	3,880	3,604
Other changes in cash from operating activities (balance)	49,090	6,273
Cash flow from ongoing operating activities	34,428	9,897
Cash inflows and outflows from investing activities	- 31,114	- 13,151
Net cash provided by financing activity	8,194	- 1,298
Change in cash and cash equivalents	11,508	- 4,552
Change in cash and cash equivalents due to effects of exchange rates and the consolidated entities	- 2,102	25
Cash and cash equivalents 01/01/2018	- 9,388	- 4,861
Cash and cash equivalents 31/12/2018	18	- 9,388

Cash and cash equivalents comprise combined liquid funds (EUR 2.4 million) less current account liabilities EUR 2.4 million. The cash outflow from investing activities is due to the first-time consolidation of geox activities in 2017.

The cash outflow from financing activities results from the scheduled repayment of bank loan and promissory note loans and the interest paid on loans and current account claims.

Extensive, preparatory work for large-scale projects in the "Deep Geothermal Energy" business area required high monetary advance payments from the Daldrup Group in fiscal year 2018. Financing and guarantee lines at German banks and insurance companies totalling EUR 25.5 million were available as of the balance sheet date to finance this operating resources requirement, to cushion liquidity peaks and guarantee positions. The financial solvency of Daldrup AG was assured at all times in the course of fiscal year 2018. Daldrup & Söhne AG, as part of the Daldrup Group will continue to process the orders acquired in 2017 and 2018 according to plan in the 2019 fiscal year. The order backlog extends well into the 2020 fiscal year and is well diversified. If these orders are processed according to plan, the Group expects to generate regular sales revenues as well as liquidity inflows from the deep geothermal segment and the general drilling business that can be easily planned. On this basis, the solvency of Daldrup AG is guaranteed beyond the fiscal year 2018.

The solvency of the Group was guaranteed at all times despite the high operating losses in the fiscal year. This is also reflected in the management's rolling liquidity controlling.

Nevertheless, the ambitious plans for the 2019 fiscal year and subsequent years, particularly in the areas of project control and cost management, must be fulfilled in order to improve the situation of the Daldrup Group. In addition, earnings from power generation at the power plants are expected to have a positive effect on the Group's cash flow in 2020. Well-known investors continue to be interested in participating in geothermal projects in the medium and long term.

# 4. OVERALL ASSERTION IN RESPECT OF THE ECONOMIC POSITION

The order situation of the Daldrup Group remains constantly good. At present, larger projects and being worked on in Germany and Switzerland. A larger project was started in the Netherlands. The order pipeline, as an outlook for potential orders, was once again noticeably increased compared to the previous year. The market environment for the Daldrup Group's products and services continued to be positive overall. Nevertheless, the Group's financial position and results of operations in 2018 were not satisfactory. The Group was unable to meet its forecast. Due to the existing shortage of skilled personnel, the two large drilling rigs could not be operated continuously. Furthermore, a major order could not be started as planned at the change of fiscal year 2017/2018 and another major project could not be started on schedule in the second half of the 2018 fiscal year. In addition, the Taufkirchen power plant was not able to reach the second stage of output improvement in 2018. In addition to the general drilling business, which continues to be in high demand, three large drilling rigs will be in operation in fiscal 2019 for the first time in many years. Two systems are already in operation in southern Germany and Switzerland. The third rig will drill in the Netherlands in the third guarter of this year. As planned, all three drilling rigs will be staffed with sufficient gualified personnel. For this reason, the Group's overall economic development in the 2019 financial year is again expected to be significantly more positive.

# **C. NON-FINANCIAL PERFORMANCE INDICATORS**

Daldrup & Söhne AG has undertaken to maintain high standards of health, safety and environmental protection. Daldrup attaches greatest importance to the fact that all employees and companies that undertake activities on behalf of Daldrup & Söhne AG are familiar with and adhere to the standards, laws and regulations of safety, health protection and environmental protection. The management, information and security system installed by the Management Board of Daldrup & Söhne AG ensures that these standards are implemented effectively.

The basics of daily activities includes the safety and health protection document in accordance with the relevant legal provisions and directives of the European Union as well as the internal guidelines of Daldrup & Söhne AG for employee management and employee development, for addiction prevention and for maintenance and servicing.

A high level of quality across all company divisions of Daldrup & Söhne AG is a decisive factor in ensuring success and customer satisfaction. SCC certification (SCC: Safety Certificate for Contractors) is therefore as much a matter of course as the performance and regular revision of quality management in accordance with DIN ISO 9001.



# **D. RISK AND OPPORTUNITIES REPORT**

The deliberate and controlled management of opportunities and risks is a key element of corporate management within Daldrup & Söhne AG. Increasing complexity and volatility in a globalised world means that the opportunities and risk system needs to be regularly adapted to changes in the underlying conditions. The risk system, the risk environment and potential threats to the Daldrup Group are described below:

## **1. STRATEGIC RISKS**

Rapid corporate growth carries risks on account of new personnel, adjustments to organisational structures and a change in the risk environment. Integration and optimisation processes are a part of day-to-day business. A continuing fall in crude oil prices has resulted in a greater supply in the deep well sector and increased pressure on competitors.

Equity investments and joint ventures may, as a result of misdirected investments and misjudgement of opportunities and risks, have a very negative, integration-related impact on the net assets, financial position and results of operations of Daldrup & Söhne AG. Careful and detailed audits in advance of such commitments are designed to minimise the risks.

The Company's Management Board and local management are working on the completion of the Taufkirchen power plant with the support of experienced geothermal consultants. However, at the Taufkirchen geothermal power plant project, the full commissioning may continue to be delayed due to technical problems, resulting among other things in possible penalties being incurred. The financial requirements could rise in the time up until the time power can be generated. Delays occurring in projects could accordingly result in lower than planned revenues from electricity sales also.

The Landau geothermal power plant could remain in the status of trial operation for a longer time due to regulatory requirements. This could result in reduced capacity utilisation and lower sales and earnings contributions from electricity sales to the Group.

## 2. BUSINESS RISKS

There are basically five threat or risk areas that may be associated with deep boreholes of the reporting company and the Group's project business:

### A. SUBSOIL RISK

The subsoil risk, i.e. the risk of known and unforeseeable effects and difficulties originating from the subsoil (all underground, geological risks), is in (legal) building practice regulated in the contracts between the parties. This is generally within the sphere of responsibility of the client. Daldrup & Söhne AG as the contractor in drilling contracts bears the risk for technical drilling operations. In the deep driling carried out by Daldrup, this risk can generally be absorbed by project-related insurance. Within the scope of the self-monitoring by trained/certified staff, the use of modern drilling technology and in close cooperation with the relevant authorities and third-party supervisors, the Daldrup Group generally also makes active provision for risks. For openly discernible risks Daldrup fulfils its duties to examine, notify and perform due diligence. Additional security is achieved by sub-contracting complex planning and engineering services to correspondingly insured service providers.

#### **B. ORDINARY OPERATING RISKS**

The operational and environmental liability risks as well as the risks of equipment breakdown and business interruption can be insured. The Group is covered for personal injury, material and environmental damage through the business and product liability insurance taken out with an insurance company. A separate machine insurance policy (including lost in hole) provides first-loss protection against potential damage to the deep drilling equipment and to all peripheral machinery and appliances. The risk of business interruption due to damage can be insured normally. Blowout risks are, in principle, to be assigned to the subsoil risk, but can also be covered, in individual cases, via increased cover as part of business liability insurance. The best insurance against blowout is to use modern and functional blowout preventers, which Daldrup regularly uses. No special risk areas exist beyond the scope of normal business liability risks. Using a rigorous and certified guality and safety concept to avoid risk and damage is accorded high importance in the operational business of the Daldrup Group.

# C. RISK OF UNSUCCESSFUL EXPLORATION ASSOCIATED WITH A DRILLING PROJECT

Special policies from insurance consortia now cover the risk of a deep borehole being unsuccessful as part of the ART concept. The parameters for successful exploration here are defined unambiguously with the quantity of fill, the temperature and the lowering of the static water level. In assessing the insurance risk, the insurability and the level of premiums for a project, the experience and references of the drilling company commissioned and the likelihood of a strike as confirmed by external reports all play a critical role. Geothermal projects planned, drilled and implemented by the Daldrup Group have regularly been commercially insurable. The ART concept reduces the exploration risk for our customers and makes it easier for Daldrup & Söhne AG to grow in the niche. Whether corresponding insurance cover has been chosen is ultimately at the discretion of the project sponsor in each case.

## **D. PROCUREMENT RISKS**

Up to this point in time, the procurement of equipment technology, raw materials, consumables and supplies, and the procurement of external services have not had a negative impact on the Daldrup Group's performance process. There are different contractor and supplier emphases in all business units given the favourable purchasing conditions and qualities, which are subject to regular monitoring by the quality management system. Under the riskbased approach to supplier management, procurement risks are being kept low through the diversification of business partners and spreading of groups of suppliers and contractors. Daldrup has identified and implemented new challenges into its systems through the further expansion of the vertical and horizontal value chain. Some parts of the service chain are dependent on suppliers.

#### **E. PERMIT RISKS**

Every extraction plant and well for the exploration and extraction of natural resources, whether for geothermal energy, water extraction or raw materials exploration, is subject to comprehensive preliminary approval procedures carried out by the competent supervisory authorities. The granting of approvals for the various types of extraction wells and plants, e.g. for the construction and/or operation of a power plant, is subject to the Federal Mining Act (BBergG), the Excavation Act, the provisions of the Federal Water Act (WHG), as well as regional water laws and construction planning and building regulations. The resulting requirements imposed on the Daldrup Group are regularly updated (see section C above) and agreed on by the regional councils, federal state authorities for geology and mining and the water supply agencies. Approval procedures can be costly and lengthy and can result in project delays. With decades of experience in dealing with the authorities, the Daldrup Group is wellversed in the requirements specifications for the approval documents. Continuous dialogue with the different authorities across the entire project phase and close, solutions-oriented coordination help us to achieve a guick consensus and avoid lengthy delays.

The existing and functional insurance concepts cover the main risks.

# **3. GENERAL ECONOMIC RISKS**

### **COMPETITIVE RISKS**

New, lucrative and growing markets are attracting additional market players. The efforts of companies in related sectors to enter the geothermal energy market are distinctly visible due to the high barriers to market entry. The Daldrup & Söhne AG's numerous reference sites, the fact that it has been well known for a number of years and its market position give it an important competitive advantage.

Additional risks exist in terms of a decline in demand as a result of changes in the market or tendering which have been lost, as well as the fact that changes in the law can result in project delays for our clients as well as project postponements.

#### PERSONNEL RISKS

The Daldrup Group employs key personnel across all business divisions (e.g. project managers, engineers and experienced drill operators), whose long-standing contacts and specialist knowledge are important for the success of the Company. The loss of key employees – e.g. due to being enticed away, illness or accident – might leave a gap, at least temporarily. The traditional dearth of professionals with the skills to operate our wide range of drilling equipment has continued to become more dire and cannot be overcome through internal training and qualification programmes. Strategic investments and acquisitions are therefore being closely monitored.

In addition, the growth of Daldrup & Söhne AG and its responsibility as a Group parent company require a foresighted organisation. Additional areas of activity in the technical and commercial domains are being created; information and communication channels as well as organisational and personnel resources must be permanently adapted to these requirements.

## ECONOMIC RISKS/USE OF FINANCIAL INSTRUMENTS

Foreign currency risks are avoided as far as possible by using the Euro as the basis for contract and price negotiations. Currency/ exchange rate hedging instruments such as forward exchange contracts and currency option contracts are used for planned orders and procurements in foreign currencies. The Daldrup Group enters into these derivative transactions only with banks that have a very good credit rating and to the extent there is an underlying transaction.

Despite the use of such financial instruments, negative effects can not be completely avoided. Speculative interest rate, currency and/ or commodity transactions were not concluded during the fiscal year and are not planned. As of the balance sheet date, derivative financial instruments were held in Swiss francs to hedge exchange rate risks from the drilling business.

If required, the Group avails itself of the practice, customary in international business, of using guarantees and letters of credit to hedge credit rating, payment and delivery risks. The clients are required to provide guarantees wherever possible in order to limit any damage due to default of payment. In terms of supplier risk, a non-delivery can result in project delays and increased costs. Daldrup & Söhne AG counters this risk with a generally broad selection of possible alternative suppliers and monitoring the critical components within the production process, such as by means of quality assurance measures and checking the production process.

Two subsidiaries of the Geysir subgroup have contractually agreed to adhere to the usual financial ratios and ratios in the course of a project or acquisition financing. Due to the delayed commissioning of a power plant as of the balance sheet date, these were not met on the whole. The subsidiary has made provision for the theoretical possibility of early termination of this loan agreement by the lender in the form that a private investor will provide any necessary funds to repay the aforementioned loans. The Management Board of Daldrup & Söhne AG has no reservations regarding the continued existence of the two subsidiaries.

Similar to the sovereign debt or financial crisis in the years 2007 to 2009, the recurring discussion on the creditworthiness of some euro zone countries could lead to limited financial readiness of credit institutions and overall complicate the implementation of numerous geothermal drilling projects, since these then increasingly compete with higher-yielding investment forms. This could give rise to impediments to growth for the geothermal market.



# 4. TECHNOLOGICAL RISKS

The drilling technology used is state of the art and is not subject to rapid technological change, meaning therefore that there is no specific risk potential. The Kalina power plant technology used in particular in the geothermal power plant in Husavik, Iceland, as well as on German soil in Unterhaching and Bruchsal, is particularly suitable for generating electricity, especially in the low temperature range. The Daldrup Group is a licensee of this process and is firmly of the opinion that the combined use of geothermal energy and Kalina technology can help make a significant contribution towards securing global energy supplies.

The IT systems are generally an external target. For this reason there are safeguards against unauthorised access and data is regularly backed up.

# 5. LEGAL RISKS

Legal disputes can arise due to the performance process and within the framework of warranties as well as within the framework of generally existing contracts. It is particularly the case with the project business that a number of different issues are contentious. Disputes can be settled for the most part without legal advice. However, for certain issues, legal disputes cannot be avoided. External specialist lawyers are regularly entrusted with the task of representing the interests of the Daldrup Group. In active processes there is a risk that claims brought before the court will not be enforceable and value adjustments would thus be required.

The contract management is organised in such a way that there is a balanced distribution of opportunities and risks for Daldrup & Söhne AG as a result of integrating legal, technical and commercial activities. The current order book is subject to these aspects of contract management.

Civic initiatives and requests as well as opponents to technology can influence policies significantly. This can be disadvantageous during the licensing procedure and can result in having to approach the courts which will clearly delay measures. The Company has taken out D&O insurance for the Management Board and the Supervisory Board and adjusted the sum insured in the 2018 fiscal year in line with the approach taken by many companies in order to be able to take recourse if necessary in the event of violations of stock exchange regulations or other violations. From 2021, the feed-in regulations are expected to change for geothermal electricity (EEG 2017) and the industry-wide learning curve will be compensate for this. However, there is always the threat of disadvantages to the Company due to legal changes.

## 6. REGULATORY AND POLITICAL RISKS

The companies of the Daldrup Group are exposed to political and regulatory changes in many countries and markets. The trend towards the active promotion of renewable energies that began in the year 2000 is subject to country-specific fluctuations and changes determined by the legislation of the respective government. Economic crises and new political power structures can also influence priorities. The uncertainty and complexities inherent in the legal provisions for the promotion of geothermal drilling projects and geothermal power plants and heating plants, as well as changes or significant curtailments to subsidies for generating electricity and supplying heat from geothermal energy can have a negative bearing on the profitability of geothermal projects and delay or freeze investments or make them obsolete.

Moreover the actionism and cheap propaganda of citizens' initiatives against geothermal projects can delay or endanger project development and approval procedures and deter investors.

Close communication with political decision-makers and active measures such as participation in public hearings, the public presentation of projects and discussions with the media to broaden awareness of the advantages of geothermal energy are preventative instruments designed to avoid risks. Diversification of regional sales markets serves to mitigate potential negative effects. The Daldrup Group operates in Germany as well as the Netherlands, Belgium and Switzerland, all with very different subsidy regimes. In the Netherlands, geothermal as a thermal energy is already in a position to compete with conventional energy sources without the need for subsidies.



## **7. OPPORTUNITIES REPORT**

Geothermal energy is increasingly gaining in importance in Germany and throughout the world as a component of renewable energies. Its advantage lies in its base load capacity and decentralised energy production in the region where it is consumed.

As for Germany subsidies are being awarded not only for generating electricity but also for heating and cooling superstructures, whether as new construction projects or as part of energy-efficient building renovation. During the last few years in Germany the regulatory framework to promote the use of heat from renewable energy sources has continued to be extended and improved. A central target of the German government is to achieve an almost climate-neutral building stock by 2050. As early as 2020, 14 % of end energy consumption for heating and cooling is expected to come from renewable energies. In addition, many cities have now launched their own climate initiatives and are defining the politically required efforts.

With the amended EEG, which came into force on 1 January 2017, framework conditions for investors in geothermal projects have stabilised and there is further planning and legal security for clients and operating companies. As a specialised provider along the value chain of turnkey geothermal heating and power plants, the Daldrup Group stands to profit from these developments. Further opportunities are opening up as a drilling services provider for deep geothermal wells and as a developer, operator and owner of geothermal power plants. With over 35 successful deep geothermal wells, the company is one of the most experienced players in the Central European market. The structures of a medium-sized company and well-trained employees also mean we can extend a high degree of flexibility and problem-solving expertise to customers and to the respective deep geological formations. The Daldrup & Söhne AG is anticipating continued correspondingly favourable conditions, an increasing demand for geothermal heating and power plants and drilling services.

## 8. OVERALL ASSERTION ON THE RISK AND OPPORTUNITY SITUATION

The company management is geared towards organisational and, above all, financial stability when there is an intentional risk strategy with an eye for business opportunities, rapid access and willingness to adjust planning. At present there are no risks to the continued existence of the Company. Financing for investments still required in the power plant sector is secured by the involvement of an investor. The commercial opportunities available far outweigh the potential risks.



# **E. FORECAST REPORT**

# **1. FUTURE CORPORATE STRATEGY**

In future, the Daldrup Group will concentrate on the drilling business and participation in power plant projects. In this context, Daldrup & Söhne AG will continue to operate the drilling business to the extent described above, i.e. in particular in the fields of shallow and deep geothermal energy, up to and including the construction of turnkey projects and in the water technology segment, as well as providing services for former mining operations.

The Group is expanding its national and European market position as a complete supplier of geothermal power plant projects in the medium-sized enterprise category as planned. Division II (Power Plants and Power Plant Holdings) will in future focus on partnership models that correspond to the medium-sized orientation and size of the Daldrup Group.

This development requires the consistent realignment of the Group's internal structures as well as the control and monitoring mechanisms. The necessary personnel and organisational adjustments relate primarily to the area of finance and controlling which will see increased staffing levels during the 2019 fiscal year. The weaknesses identified in 2017 and 2018 will be pursued with the necessary vigour and remedied in the 2019 financial year.







# 2. FUTURE ECONOMIC ENVIRONMENT

In its spring forecast during the middle of March of this year, the IfW predicts a strong upturn for 2019 and 2020 in Germany. The German economy is showing clear signs of slowing, but at present there is nothing to suggest an abrupt slump in the economy or even a recession, according to the economic researchers. They expect German GDP to grow by 1.0 % in 2019. For 2020, they expect growth of 1.8 %. However, despite the economic slowdown, overall capacity utilisation in the economy as a whole will remain above average. The weak start to the year in the industrial sector is also a decisive factor here. In addition, political uncertainties, trade conflicts and the uncertainty about China's economic condition are weighing on the outlook.

The IfW remains cautiously optimistic about economic development in the euro zone. This is the case because the economy will continue to be supported in the future by low interest rates and a slightly expansive financial policy. Foreign trade should again contribute to some degree to more expansion in the forecast period 2019 than in the previous year – provided that global trade policy conflicts do not intensify. According to the IfW, GDP will expand by 1.2 % in the current year and production is expected to increase slightly to 1.5 % in 2020.

The forecast presented by the IfW also points to considerable risks that accompany economic trends. Among the downside risks, the experts point to further escalation of international trade conflicts, which could severely disrupt the international exchange of goods and significantly impair the economy in Europe as well. Even a conceivable sharp slump in expansion in important trading partners such as the USA or China would have a noticeable negative impact on the European economy. There is still no agreement on a future trade regime with regard to the UK's withdrawal from the European Union. If no agreement is reached in this context, at least for a transitional period, countries in the euro zone will also be threatened with restrictions on trade in goods with far-reaching negative consequences for the economy.

#### ENERGY CONSUMPTION RISING WORLDWIDE

In its International Energy Outlook (IEO) for 2018, the IEA notes that major changes are currently taking place in the global energy sector. These include increasing electrification and the expansion of renewable energies. Using a baseline scenario ("Current Policies"), the IEA expects energy demand to grow by 25 % by 2040. This would require an annual investment of 2 trillion US dollars in new energy sources. In the electricity markets, renewable energies have become the technology of choice and will account for almost two-thirds of global capacity expansion by 2040. According to the IEO, this is mainly due to falling costs and a supportive funding policy. The global electricity mix will change: The share of renewable energies in generation can increase from today's level of 25 to more than 40 % by 2040, although coal and gas sources will continue to dominate the market .

According to the IEO, the share of renewable energies in the global heat supply will rise by five percentage points to 15 % by 2040. Around 60 % of this increase is expected to occur in China, the European Union, India and the United States, which are also today's largest consumers of heat from renewable energy sources.

# FRAMEWORK FOR THE ENERGY REVOLUTION WILL BE FURTHER DEVELOPED

The social consensus on phasing out nuclear energy by the end of 2022 and the final report presented in January 2019 the so-called Coal Commission for the phasing out of energy production using lignite and hard coal by 2038 will set the stage for a change of direction towards a secure, affordable and environmentally compatible energy supply based on renewable energies. The German government has also signed the Paris climate agreement of December 2015, which aims to limit global warming to below 2 °C. The EU, too, has set itself high targets for the expansion of renewable energies and the reduction of CO<sub>2</sub> emissions. By 2020, it wants 20 % of energy consumption in the EU Member States to come from renewable sources. By 2030 this value should increase to 27 %. In order to achieve the long-term goal of the binding climate and energy package of reducing greenhouse gas emissions by 80 % to 95 % by 2050, the EU set itself the following interim targets for 2030 in June 2018:

- Internal EU greenhouse gas emissions will be reduced by at least 40 % by 2030 compared to 1990 levels.
- The use of renewable energies will be increased to 30 % of the total final energy consumption.
- Energy efficiency will be increased by 32.5 % compared to trends without further efficiency efforts.

In Germany renewable energies represent almost half of its powergenerating capacity and in 2018 they achieved a 37.8 % share in its gross energy consumption. They have become part of this market. Renewable energies are expected to contribute the main share to the energy supply in future. By 2025 their share in gross energy consumption is expected to increase to between 40 % and 45 %. Renewable energies must therefore continually be integrated into the energy supply system so that they increasingly replace conventional fossil fuels. Therefore, generators with an ability to supply base load, such as geothermal energy, are an important building block.

The expansion of renewable energies in the heating market is also crucial to the energy revolution. More than half of our energy is spent on heating and cooling. Through the National Energy Efficiency Action Plan (NAPE) and other planned initiatives, the German government aims to implement its central target of achieving an almost climate-neutral building stock by 2050. As early as 2020 14 % of end energy consumption for heating and cooling is expected to come from renewable energies. In 2018, heat consumption from renewable energies already rose to 13.9 % (previous year: 13.4 %). An extended funding framework, in particular for the buildings sector, is currently under political discussion. According to the German Renewable Energy Federation (BEE), today's known resources of hydro-thermal deep geothermal energy could cover about 29 % of German heating demand and an additional 28 % with near-surface geothermal energy.

# DEMAND FOR ELECTRICITY AND HEAT FROM GEOTHERMAL ENERGY WILL GROW

The Federal Environment Agency's study "Energy Target 2050" on the feasibility of a purely renewable energy supply identified considerable potential for generating electricity from geothermal energy. On the basis of the working report "Possibilities of geothermal power generation in Germany" from the Office for Technology Assessment (TAB) (TAB report), the technical-ecological potential of geothermal power generation in Germany that can be tapped by 2050 is estimated at 63.75 TWh/year (gross) with an installed capacity of 8.5 gigawatts electric (GWel gross). This corresponds to 2,120 geothermal power plants (doublets152, 4 MWel). The power requirement of a geothermal doublet plant with an installed capacity of 4 MWel is approximately 25 %. This results in a technical-ecological potential (net electricity generation) in the year 2050 of approx. 50 TWh/a with an installed net capacity of 6.4 GWel.

According to call to action from BEE, deep geothermal energy is to be expanded from 2021 to 2030 so that 50 MW can be installed annually. This is a prerequisite for achieving the climate protection targets set by the Federal Government in 2030, including a 65 % share of renewable energies in the electricity sector.

Heat generation by way of renewable energies is a "sleeping giant" that has a great deal of potential for climate protection purposes as well as for becoming self-sufficient in terms of resources. According to forecasts made by the BBE, bioenergy is expected to provide the largest proportion of heat supplies by 2020; however, the contribution made by geothermal energy, solar thermal energy and heat pumps is expected to grow significantly in the coming years.

The aim is thus for renewable energies to become the mainstay of electricity and heat supply. The rate of expansion and the specific growth of the geothermal energy industry are determined on the one hand by the development and organisation of funding instruments in Germany and Europe, but are also dependent on various crucial economic issues on the other hand. The increase in prices for fossil fuels, the introduction of palpable sanctions for CO<sub>2</sub> emissions, economic stability, a robust employment situation on the labour market and the consolidation of state and bank finances in the euro area are the cornerstones, promising opportunities for higher industry growth.

The positioning of geothermal energy for the future alignment of energy supplies is very good. It is decentralised and does not require any overly expensive expansion of the grid. It is almost inexhaustible and an inexpensive resource. It can supply base load (i.e., regardless of time of the day, season and weather conditions), and makes a relatively large contribution to environmental and climate protection and provides an outstanding  $CO_2$  footprint. The potential to reduce costs can be increased by pending projects, so that the costs of geothermal electricity and heat generation are rapidly approaching the market level. Furthermore, high levels of skill and expertise mean that it is now possible to meet the high safety requirements demanded by the licensing authorities and, above all, the public. The EEG promotion of geothermal energy is thus fulfilling its proper purpose: the granting of temporary transition/bridge financing.

The value and growth-oriented objectives of Daldrup & Söhne AG and the strategic transformation process regarding further development from providing drilling services to being an independent, mediumsized, energy supply company have continued to be pursued.

Owing to the specific technical and personnel requirements placed on deep drilling, the high capital requirements for drilling rigs and special equipment, the mining regulations and the complex approval procedures, Daldrup & Söhne AG fundamentally benefits from the high market entry barriers for deep geothermal energy.

## 3. EXPECTED RESULTS OF OPERATIONS AND FINANCIAL POSITION

Despite extensive precautions, the drilling and project business continues to be afflicted with uncertainties that cannot always be planned or comprise natural unknown factors, as delays and fluctuations can occur based on planning, approval and tendering processes, the geology, particular infrastructural conditions and the demands of project financing. It is still not possible to preclude such changes from impacting the results of operations and financial position of Daldrup & Söhne AG.

Daldrup & Söhne AG anticipates new growth in its business and the company due to the expansion in the value-added chain in its drilling and project business in 2019.

In addition to already high number of orders booked, additional new drilling contracts are to be expected in the course of the 2019 fiscal year and 2020 from municipal and private clients in Germany as well as orders from the Benelux countries. In the past fiscal year, too, countless discussions were held with institutional and strategic investors, private-sector special-purpose associations and local authorities, who are now keenly interested in geothermal heating plants and power stations both as yield-oriented investment properties and as climate-friendly, decentralised and economic supply units.

A completely new market is emerging within the framework of national searches for final repositories for nuclear waste products. Our Swiss client NAGRA represents our first customer in this segment outside of Germany. Core drilling work has begun in Switzerland.

Based on the current good order situation with the correspondingly good utilisation of the drilling rigs, the Management Board of Daldrup & Söhne AG expects that the reporting company will be able to achieve a total operating performance of at least EUR 40 million in the 2019 financial year, with a total output of 2 % to 5 %, if, among other things, three major orders are invoiced as planned. The loss from 2018 is largely due to one-off effects, which should not be repeated in 2019.

# F. DISCLOSURES RELATING TO TREASURY SHARES PURSUANT TO SECTION 160(1) NO. 2 AKTG

Disclosures relating to treasury shares pursuant to section 160(1) no. 2 (AktG) and section 289(2) sentence 2 HGB are listed in the appendix.

## G. MANAGEMENT BOARD'S CONCLUDING STATEMENT ON THE DEPENDENT COMPANY REPORT

In conclusion, we state that Daldrup & Söhne Aktiengesellschaft, based on the circumstances known to us at the point in time at which legal transactions were carried out or actions taken or omitted, received reasonable consideration for every legal transaction and was not disadvantaged by actions being taken or omitted.

Grünwald, 29 May 2019

Daldrup & Söhne AG The Management Board

Josef Daldrup (CEO)

Peter Maasewerd (Board member)



Andreas Tönies (Board member)



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# **INDEPENDENT AUDITOR'S REPORT**



# CONSOLIDATED INCOME STATEMENT

## FOR FISCAL YEAR 1 JANUARY TO 31 DECEMBER 2018

	01/01/2018 - 31/12/2018 EUR	01/01/2017 - 31/12/2017 EUR
1. Sales revenues	38,938,384.94	24,757,769.27
2. Increase/decrease in work in progress	- 4,030,880.17	18,285,897.36
Total output	34,907,504.77	43,043,666.63
3. Other operating income	1,520,797.35	2,332,761.45
- of which from currency translation: EUR 53,414.43 (previous year: EUR 7,589.38)		
4. Cost of materials		
a) Cost of raw materials, consumables and supplies, and of purchased merchandise	10,583,651.43	13,405,594.15
b) Cost of purchased services	18,550,932.21	8,398,536.84
	29,134,583.64	21,804,130.99
5. Personnel expenses		
a) Wages and salaries	7,090,002.87	7,097,508.12
b) Social security, post-employment and other employee benefit costs	1,327,335.98	1,409,734.13
- including retirement benefit: EUR 61,958.82 (previous year: EUR 55,576.53)		
	8,417,338.85	8,507,242.25
6. Amortisation and write-downs of intangible fixed assets and depreciation and write-downs of tangible	3,879,696.04	3,604,252.48
fixed assets		
7. Other operating expenses	11,563,082.29	10,366,868.38
– of which from currency conversion: EUR 0.00 (previous year: EUR 197,128.55)		
8. Income from other securities and long-term loans	27,673.76	96,153.53
9. Other interest and similar income	318,064.77	657,421.63
10. Expenses from long-term investments in associates	0.00	61,609.92
11. Interest and similar expenses	2,436,038.58	1,796,782.24
- of which from interest accumulation from provisions: EUR 0.00 (previous year: EUR 19,201.35)		
12. Taxes on income and revenue	151,800.26	14,239.31
- of which from deferred taxes: EUR 80,687.27 (previous year: EUR 19,201.35)		
13. Net earnings	- 18,808,499.01	- 25,122.33
14. Other taxes (income)	266,121.72	44,899.77
15. Consolidated net loss/ net income for the year annual net income	- 18,542,377.29	19,777.44
16. Minority interests	- 1,387,050.80	- 209,194.30
17. Group profit carried forward	11,106,412.96	10,877,441.22
18. Consolidated balance sheet loss/profit	- 6,048,913.53	11,106,412.96



# CONSOLIDATED BALANCE SHEET

# CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2018

ASSETS	31/12/2018 EUR	31/12/2017 EUR
A. Fixed Assets		
I. Intangible assets		
Purchased concessions, industrial rights and similar rights and assets and licences for such rights and assets	2,768,196.67	691,709.61
II. Property, plant and equipment		
1. Land, land rights and buildings, including buildings on third-party land	4,284,715.94	1,752,332.81
2. Technical equipment and machinery	20,171,594.01	22,712,262.83
3. Other equipment, operating and office equipment	2,565,469.69	2,829,372.90
4. Prepayments and assets under construction	85,871,497.09	8,551,272.01
	112,893,276.73	35,845,240.55
III. Financial assets		
1. Shares in affiliated companies	10,000.00	0
2. Shares in associated companies	0	21,870,934.23
3. Long-term securities	181.00	181.00
4. Other loans	981,095.04	1,150,011.04
	991,276.04	23,021,126.27
	116,652,749.44	59,558,076.43
B. Current Assets		
I. Inventories		
1. Raw materials, consumables and supplies	3,026,522.60	3,084,648.48
2. Work in progress	25,443,983.96	81,189,599.56
3. Prepayments on orders	0.00	5,729,289.13
4. Payments received on account of orders	- 21,087,691.79	- 67,420,265.63
	7,382,814.77	22,583,271.54
II. Receivables and other assets		
1. Trade receivables	4,338,044.69	3,228,218.42
2. Receivables owed by affiliated companies	1,619.51	0.00
3. Receivables from associated companies	0.00	230,079.82
4. Other assets		
- of which due after more than one year: EUR 0.00 (previous year: EUR 803,453.36)	10,595,264.73	14,375,948.60
	14,934,928.93	17,834,246.84
III. Cash on hand and credit balances at banks	2,425,596.22	1,464,281.43
	24,743,339.92	41,881,799.81
C. Prepaid Expenses	68,483.11	43,886.33
D. Deferred Tax Assets	300,369.33	232,445.60



LIABILITIES	31/12/2018 EUR	31/12/2017 EUR
A. Equity		
I. Subscribed capital	5,989,500.00	5,445,000.00
Treasury shares	- 4,017.00	- 4,017.00
	5,985,483.00	5,440,983.00
II. Capital reserves	36,355,875.01	30,502,500.00
III. Retained earnings		
1. Legal reserve	25,000.00	25,000.00
2. Other revenue reserves	510,036.31	264,013.96
IV. Currency translation adjustments	- 1,248,059.21	- 1,174,897.58
V. Consolidated balance sheet loss/profit	- 6,048,913.53	11,106,412.96
	29,593,938.58	40,723,029.34
VI. Minority interests	19,207,504.21	- 59,307.08
	54,786,925.79	46,104,705.26
B. Differential amount from capital consolidation		
1. The difference resulting from the capital consolidation	1,723,846.46	0.00
	1,723,846.46	0.00
C. Special item with equity portion		
1. Special item with equity portion	121,000.00	121,000.00
	121,000.00	121,000.00
D. Provisions		
1. Provisions for pensions	0.00	911,378.00
2. Tax provisions	121,598.11	113,913.49
3. Other provisions	4,849,384.68	5,190,820.56
	4,970,982.79	6,216,112.05
E. Liabilities		
1. Liabilities to credit institutions	10,993,023.79	14,523,324.28
<ul> <li>of which due within one year: EUR 9,823,843.79 (previous year: EUR 12,433,904.28)</li> <li>of which are due between one and five years: EUR 1,169,180.00 (previous year: EUR 2,089,420.00)</li> </ul>		
<ol> <li>Advance payments received on orders         <ul> <li>of which due within one year: EUR 954,900.00 (previous year: EUR 0.00)</li> </ul> </li> </ol>	954,900.00	0.00
<ol> <li>Trade payables</li> <li>– of which due within one year: EUR 9,585,393.51 (previous year: EUR 8,482,994.58)</li> </ol>	9,585,393.51	8,482,994.58
<ol> <li>Liabilities to associated companies         <ul> <li>of which due within one year: EUR 0.00 (previous year: EUR 50,319.52)</li> </ul> </li> </ol>	0.00	50,319.52
<ul> <li>5. Other liabilities</li> <li>– of which due within one year: EUR 8,899,917.27 (previous year: EUR 3,527,282.89)</li> <li>– of which due after more than one year: EUR 44,842,874.13 (previous year: EUR 21,868,634.96)</li> <li>– of which from taxes: EUR 910,656.79 (previous year: EUR 164,381.97)</li> <li>– of which from social security: EUR 70,517.47 (previous year: EUR 47,975.79)</li> </ul>	53,742,791.40	25,395,917.85
	75,276,108.70	48,452,556.23
F. Deferred Income	3,093.58	14,835.61
G. Deferred Tax Liabilities	4,882,984.48	806,999.02
Balance Sheet Total	141,764,941.80	101,716,208.17

# CONSOLIDATED EQUITY STATEMENT

## CONSOLIDATED EQUITY STATEMENT FOR THE FISCAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

	PARENT COMPANY					
	Subscribed Capital	Treasury shares	Capital reserves	Self-generated group equity	Accumulated other comprehensive	Accumulated other comprehensive
	EUR	EUR	EUR	EUR	income EUR	income EUR
					Currency translation adjustments	Other items recognised directly in equity
As at 01/01/2018	5,445,000	- 4,017	30,502,500	6,968,324	- 1,174,898	4,427,103
Consolidated loss for the year	0	0	0	- 17,155,326	0	0
Capital increase	544,500	0	5,853,375	0	0	0
Changes to investment relationships	0	0	0	0	0	0
Other group earnings	0	0	0	246,022	- 73,162	0
As at 31/12/2018	5,989,500	- 4,017	36,355,875	- 9,940,980	- 1,248,059	4,427,103

	MINORITY SHAREHOLDERS				GROUP EQUITY
Equity EUR	Minorities capital EUR	Accumulated other comprehensive income EUR	Accumulated other comprehensive income EUR	Equity EUR	EUR
		Currency translation adjustments	Other items recognised directly in equity		
46,164,012	169,295	- 228,602	0	- 59,307	46,104,705
- 17,155,326	- 1,387,051	0	0	- 1,387,051	- 18,542,377
6,397,875	0	0	0	0	6,397,875
0	20,653,862	0	0	20,653,862	20,653,862
172,861	0	0	0	0	172,861
35,579,421	19,436,106	- 228,602	0	19,207,504	54,786,925



# CONSOLIDATED CASH FLOW STATEMENT

## CONSOLIDATED CASH FLOW STATEMENT FOR THE FISCAL YEAR 2018

	01/01 - 31/12/2018 EUR	01/01- 31/12/2017 EUR
1. Cashflow resulting from ongoing business activity		
Result for the period including third-party shares	- 18,542,377.29	19,777.44
Scheduled depreciation of fixed assets	3,879,696.04	3,604,252.48
Increase/reduction in provisions	- 1,320,796.74	2,933,400.69
Increase/decrease in inventories, trade receivables and other assets that are not attributable to investing or financing activities	20,161,454.99	694,463.94
Increase/decrease in trade payables and other liabilities that are not attributable to investing or financing activities	28,189,776.45	763,294.19
Profit/loss from disposal of fixed assets	51,000.00	61,066.90
Interest expenses	2,436,038.58	1,796,782.24
Interest income	-318,064.77	- 657,421.63
Other investment income	-27,673.76	-96,153.53
Income tax expense/income	151,800.26	- 14,239.31
Income tax refunds/payments	-232,487.53	791,915.61
Cashflow resulting from ongoing business activity	34,428,366.23	9,897,139.02
2. Cash flow from investment activities		
Inflows from disposals of intangible assets and property, plant and equipment	289,070.02	0.00
Outflows for investments into intangible and tangible fixed assets	- 11,146,092.48	-14,271,410.23
Inflows from disposals of financial assets	168,916.00	366,522.26
Outflows for investments into financial assets	-10,000.00	-162.96
Disbursements for additions to the consolidation group	- 20,761,821.28	0.00
Interest received	318,064.77	657,421.63
Dividends received	27,673.76	96,153.53
Cash flow from investment activities	- 31,114,189.21	-13,151,475.77
3. Cash flow from financing activities		
Proceeds from capital contributions from shareholders of the parent company	6,397,875.01	0.00
Inflows from the issuance of bonds and raising of (financial) loans	4,913,930.77	2,338,420.00
Outflows from the repayments of bonds and (financial) loans	- 682,000.00	- 1,869,200.00
Interest paid	- 2,436,038.58	- 1,766,918.24
Cash flow from financing activities	8,193,767.20	- 1,297,698.24
4. Cash and cash equivalents at the end of the period		
Cash change in cash and cash equivalents (Subtotals 1 - 3)	11,507,944.22	- 4,552,034.99
Changes in cash and cash equivalents due to effects of consolidated entities	- 2,102,397.86	24,951.01
Cash and cash equivalents at the start of the period	- 9,387,822.85	- 4,860,738.87
Cash and cash equivalents at the end of the period	17,723.51	- 9,387,822.85
5. Composition of cash and cash equivalents		
Cash in hand and credit balances at banks	2,425,596.22	1,464,281.43
	_,,	.,
Liabilities to banks (current account liabilities)	- 2,407,872.71	-10,852,104.28



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE FISCAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

# GENERAL DISCLOSURES ON THE CONSOLIDATED FINANCIAL STATEMENTS

The Group parent company, Daldrup & Söhne AG, based in Grünwald, is a provider of drilling and environmental services.

Daldrup & Söhne AG is entered in the commercial register of Munich District Court under HRB 187005. It is a company which was set up in Germany as a public limited company and with its registered office in 82031 Grünwald, Bavariafilmplatz 7.

Insofar as options for information contained in the consolidated balance sheet, in the consolidated income statement, or in the notes to the consolidated financial statements may be exercised, comment was made in the balance sheet or the profit and loss accounting. Presentation of the analysis of consolidated fixed assets is provided on pages 82-83 to the notes to the consolidated financial statements.

The Company is required, pursuant to section 290(1) HGB, to prepare consolidated financial statements and a group management report.

The consolidated financial statements are prepared on the basis of the accounting standards of the German Commercial Code and the German Stock Corporation Act.

# **CONSOLIDATION METHODS**

Not only the parent company, but all domestic and foreign subsidiaries under the legal control of Daldrup & Söhne AG are included in the consolidated financial statements.

The annual financial statements of subsidiary companies are prepared on the same balance sheet date as the annual financial statements of the parent company, using standard accounting policies.

The effects of intercompany transactions are eliminated. Receivables and payables between the companies included are consolidated.

The negative goodwill from capital consolidation stems from earnings retained at subsidiaries following the acquisition of investments, but prior to the reporting date of the first-time consolidation. It has therefore been recognised directly in equity without affecting net income.

The accounting of the shares in those companies on which the Group has no dominant but a significant influence, is carried out using the equity method. Initially, these associated companies are recognised at cost. The Group's share of the profits and losses of these companies is recognised in the income statement from the moment of their acquisition. The cumulative changes are offset against the investment value.

Accounting is carried out in accordance with a standard policy for the Group, in order to ensure that there is uniform accounting amongst all included companies and associated companies.

# **CONSOLIDATED ENTITIES**

# IN ADDITION TO THE PARENT COMPANY, 18 DOMESTIC AND 4 FOREIGN SUBSIDIARIES AND ASSOCIATED COMPANIES ARE INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS AS AT 31 DECEMBER 2018. THESE ARE MADE UP AS FOLLOWS:

NAME AND REGISTERED OFFICE OF THE COMPANY	Capital Direct	Capital Indirect
Daldrup Bohrtechnik AG, Baar/Switzerland	100.00	
D&S Geothermie GmbH, Grünwald	100.00	
Daldrup Wassertechnik GmbH, Ascheberg	100.00	
Przedsiebiorstwo Projektow Gorniczych i Wiercen Geologicznych "DMM" Sp. z o.o., Katowice/Poland	50.44	
GERF B.V., 's-Gravenzande (Netherlands)		100.00
Geysir Europe GmbH, Grünwald		75.01
Exorka GmbH, Grünwald		100.00
Exorka ehf, Husavik/Iceland		100.00
geox GmbH, Landau (in der Pfalz)		90.00
Geothermie Allgäu Betriebs- und Beteiligungs GmbH & Co. KG, Grünwald		100.00
Geothermie Allgäu Verwaltungs GmbH, Grünwald		100.00
Geothermie Starnberg GmbH & Co. KG, Grünwald		100.00
Geothermie Taufkirchen GmbH & Co. KG, Grünwald		100.00
Geothermie Starnberg Verwaltungs GmbH, Grünwald		100.00
Erdwärme Taufkirchen GmbH & Co. KG, Grünwald		100.00
Erdwärme Taufkirchen Verwaltungs GmbH, Grünwald		100.00
GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald		73.61
GeoEnergie Taufkirchen Verwaltungs GmbH, Grünwald		73.83
Taufkirchen Holding GmbH & Co. KG, Grünwald		100.00
Taufkirchen Holding Verwaltungs GmbH, Grünwald		100.00
Geothermie Neuried GmbH & Co. KG, Neuried		100.00
Geothermie Neuried Verwaltungs GmbH, Neuried		100.00
Geysir Chile S.A., Santiago/Chile		100.00



Geysir Europe GmbH, Grünwald, acquired the remaining 10 % of the shares in geox GmbH, Ascheberg, from EnergieSüdwest AG, Landau, with substantive effect from 15 January 2019 (UR. No. 598/2018). The Company thus holds a 100% interest in geox GmbH for the 2019 fiscal year.

Geothermie Taufkirchen GmbH & Co. KG has reached an agreement with Axpo Power AG from Baden, Switzerland, to acquire a 35 % stake in GeoEnergie Taufkirchen GmbH & Co. KG, the project company of the Taufkirchen geothermal power plant. In addition to the previous treasury shares of 38.61 % in the project company, Geysir Europe Group will thus acquire another 35 % and thus hold a total of 73.61 % of the shares in the Taufkirchen geothermal power plant. The additional 26.31 % remain with the Gemeindewerke Oberhaching GmbH and 0.08 % with the BioEnergie Taufkirchen GmbH & Co. KG. For the first time in 2018, the purchase leads to the full consolidation of the Taufkirchen geothermal power plant in the consolidated financial statements of Daldrup & Söhne AG.

Geysir Europe GmbH acquired 100 % of Geysir Chile S.A. in fiscal 2018. Due to its minor importance, the company is not included in the consolidation.

# FOREIGN CURRENCY TRANSLATION

Assets and liabilities of foreign subsidiaries are translated at the mid-spot exchange rates on the balance sheet date and income statement items at the average exchange rates for the year. The parts of equity to be included in the capital consolidation as well as the retained profits and accumulated losses brought forward are translated at historical exchange rates.

Any differences in the balance sheet to which this gives rise are recognised directly in equity as "foreign currency translation adjust-ments".

FOREIGN CURRENCY TRANSLATION	Exchange rate 1 € =	Annual average exchange rate as at 31/12/2018	Closing rate as at 31/12/2018
Swiss francs	CHF	1.1550	1.2930
Icelandic Krona	ISK	127.88	133.51
Polish Zloty	PLN	4.2615	4.2900

# **ACCOUNTING POLICIES**

### ASSETS

Acquired intangible fixed assets and fixed assets have been recognised at cost and, if liable to depreciation/amortisation, have been reduced by scheduled depreciation/amortisation.

Depreciation is calculated linearly according to the expected useful life. Low-value assets between EUR 250.00 and EUR 1,000.00 are entered in a collective item and amortised linearly over a period of five years. Assets under EUR 150.00 are recorded directly as expenses.

Shares in associated companies were valued using the equity method.

Securities classified as fixed assets have been accounted for at their nominal value.

Extraordinary depreciation of assets of the fixed assets was made where a permanent impairment exists.

Raw materials, consumables and supplies have been recognised at cost. If the daily values were lower on the balance sheet date, these values have been recognised.

Drilling contract services in progress are measured by means of reverse costing from the order value, taking into account the degree of completion on the balance sheet date and a flat-rate deduction of 12.5 % for the share of profit not yet implemented and non-capitalisable costs. Project business services in progress (construction of the Taufkirchen power plant) are measured by means of attributable manufacturing costs.

Receivables and other assets have been recognised at their nominal value.

In the case of receivables, individual risks have been taken into account by means of adequately measured specific valuation allowances and the general credit risk of the parent company by means of appropriate flat-rate deductions of 1 %. Cash in hand and credit balances at banks have been recognised at their nominal value. Balances in foreign currency are translated at the mean spot exchange rate on the balance sheet date.

Prepaid expenses and accrued income include expenses before the balance sheet date which will only become expenses in the following year.

Deferred tax assets and liabilities are, in principle, measured using the tax rates valid as at the balance sheet date. Future tax rate changes are taken into account if, within the scope of a legislative procedure, substantial prerequisites for its future applicability have been met on the balance sheet date. In this case, a flat rate of 30.0 %, which includes the standard corporation tax rate of 15.0 %, the solidarity surcharge of 5.5 % and an average trade tax rate of 14.2 %, is used.

### LIABILITIES

Subscribed capital has been recognised at par value.

The calculated par value of acquired treasury shares has been deducted from subscribed capital on the face of the balance sheet.

The special item shows construction cost subsidies which are distributed over the useful life of the asset.

Other provisions have been recognised for any other uncertain liabilities at the settlement amount dictated by prudent business judgement. All identifiable risks were taken into account. If the liabilities were due after more than one year, maturity-matched discounting was carried out using the interest rates published by the Deutsche Bundesbank.

Liabilities have been recognised at their settlement amount.

Deferred income and accrued expenses include inflows before the balance sheet date which will only become income in the following year.



# CONSOLIDATED BALANCE SHEET AND CONSOLIDATED INCOME STATEMENT DISCLOSURES

# **I. BALANCE SHEET**

## **FIXED ASSETS**

The consolidated statement of changes in fixed assets as at 31/12/2018 is set out on pages 82 - 83 of the Notes.

The list of direct and indirect shareholdings of all subsidiaries is shown on page 65. The shares in associated companies totalling EUR 10k relate to Geysir Chile S.A., Santiago de Chile.

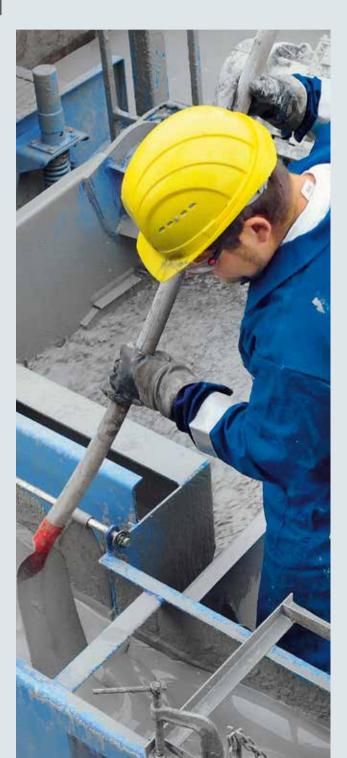
## **CURRENT ASSETS**

## INVENTORIES

Payments received are openly deducted from inventories.

## RECEIVABLES

The remaining term of receivables is less than one year.





#### **OTHER ASSETS**

OTHER ASSETS AS AT 31/12/2018 IN EUR K				
Description	Total amount	due within within 1 year	due within more than one year	Total amount in previous year
1. Loans receivable	5,708	5,708	0	8,614
2. Receivables from associated companies	0	0	0	670
3. Repayment claims from advance payments	1,643	1,64	0	1,644
already made		3		
4. Insurance compensation	950	950	0	1,119
5. Claims from reinsurance cover	288	288	0	807
6. VAT receivables	364	364	0	441
7. Claims against suppliers	0	0	0	419
8. Heat deliveries still to be invoiced	960	960	0	0
9. Other	682	682	0	662
Total other assets assets	10,595	10,595	0	14,376

6. includes input tax receivables in the amount of EUR 228k which will be incurred only in 2019.

## **DEFERRED TAX ASSETS**

The deferred taxes were calculated using a tax rate of 30.0 %. The deferred taxes were calculated based on a corporation tax rate of 15.0 %. A solidarity surcharge of 5.5 % on any corporation tax as well as an average trade tax rate of 14.2 % were also used as the basis for this calculation.

## EQUITY

Changes in equity are presented in the statement of changes in equity, which forms part of the consolidated financial statements.

## SHARE CAPITAL

On 27 February 2018, the Management Board of Daldrup & Söhne AG made use of the authorisation specified in the Articles of Association

with the approval of the Supervisory Board on the same day, and has decided to increase the share capital by EUR 544.5k to EUR 5,989.5k by issuing 544,500 new no-par-value bearer shares with a notional interest in the share capital of Daldrup & Söhne AG in the amount of EUR 1 per share at an issue price of EUR 1 per share.

The share capital amounts to EUR 5,989.5k (31/12/2017: EUR 5,445k); it is split into 5,989,500 (31/12/2017: 5,445,000) no-par-value bearer shares (ordinary shares). Authorised capital as at 31/12/2018 amounts to EUR 2,994.75k (31/12/2017: EUR 2,723k).

The subsidiary Daldrup Bohrtechnik AG, Baar, holds 4,012 shares in Daldrup & Söhne AG, which corresponds to EUR 4,017 of the share capital or 0.1 % of the share capital.

## CAPITAL RESERVES

The capital reserve amounts to EUR 36,356k (31/12/2017: EUR 30,503k). It consists of the premium for issuing shares obtained in the context of the IPO (31/12/2017: EUR 30,503k) and the capital increase carried out during the fiscal year (EUR 5,853k).

#### LEGAL RESERVE

The legal reserve pursuant to section 150 AktG amounts to EUR 25k, unchanged compared to the previous year.

## **OTHER REVENUE RESERVES**

Other revenue reserves amount to EUR 510k (31/12/2017: EUR 264k).

#### **CONSOLIDATED NET RETAINED PROFITS**

Consolidated net retained profits developed as follows:

Retained profits brought forward 01/01/2018	EUR 11,106k
---	-------------

- Consolidated net loss for the fiscal year EUR 18,542k
- Loss attributable to minority shareholders EUR 1,387k
- Consolidated balance sheet loss 31/12/2018 EUR 6,049k

For the past fiscal year, the Management Board proposes to carry forward the net loss for the year in the amount of EUR 11,855k to new account.

It is, in principle, not the consolidated net retained profits, but the net retained profits from the individual financial statement of the parent company that are available for distribution purposes. The balance sheet loss as at 31/12/2018 amounts to EUR 1,013k.

The total amount pursuant to section 268(8) HGB (the payout block) is EUR 300k. This amount is due to the capitalisation of deferred tax receivables.

#### DIFFERENTIAL AMOUNT FROM CAPITAL CONSOLIDATION

The initial consolidation of GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald, resulted in a passive difference of EUR 1,724k. The reason for the passive difference is the low purchase price for the newly acquired shares in GeoEnergie Taufkirchen GmbH & Co. KG.

### **PENSION PROVISIONS**

Mr Josef Daldrup was granted a pension in accordance with the pension commitment of 1 December 1999 and the supplement of 18 May 2000. This will become effective after reaching the age of 65.

Mr. Daldrup has chosen the option to receive a one-off capital payment of EUR 668 thousand instead of a monthly pension at the start of the pension period. The amount of this capital payment corresponds to the present value of the old-age pensions including the survivor's pension entitlement at the start of the pension period, which was determined according to actuarial principles.

The pension provision was reversed as of the balance sheet date.

#### TAX PROVISIONS

Tax provisions amount to EUR 122k (previous year: EUR 114k).

## **OTHER PROVISIONS**

STATEMENT OF PROVISIONS AS AT 31/12/2018 IN EUR K					
Description	01/01/2018	Utilisation	Closing	Transfer	31/12/2018
Personnel provisions	1,310	953	253	1,026	1,130
Global provision for warranties	153	0	29	0	124
Other provisions	3,728	1,091	550	1,508	3,595
Total other provisions	5,191	2,044	832	2,534	4,849

The global provision for guarantees was based on 0.5 % of the average revenue of the last five years. This took into account a different weighting of the individual years as well as discounting. Other provisions were recognised for outstanding invoices for the renovation of the Landau power plant of geox GmbH, litigation costs, audit of annual financial statements, archiving costs, etc.

## LIABILITIES

STATEMENT OF LIABILITIES AS AT 31/12/2018 IN EUR K					
Type of liability	Total amount	due within one year	due within one to five years	due after more than five years	Total amount previous year
1. Liabilities to banks	10,993	9,824	1,169	0	14,523
2. Advance payments received on orders	955	955	0	0	0
3. Trade payables	9,585	9,585	0	0	8,483
4. Liabilities to associated companies	0	0	0	0	50
5. Liabilities to minority shareholders	13,112	13,112	0	0	12,751
6. Other liabilities to pension funds	9,371	917	8,454	0	10,072
7. Other liabilities to capital investment companies	24,574	2,052	5,568	16,954	0
8. Tax liabilities	911	911	0	0	164
9. Other liabilities from share purchases	3,666	3,666	0	0	0
10. Other miscellaneous liabilities	2,109	2,109	0	0	2,409
Total Liabilities	75,276	43,131	15,191	16,954	48,452

Total amount of liabilities secured by liens and similar rights:

• to banks: EUR 2,090k

• other liabilities to pension funds: EUR 9,371k

• other liabilities to capital investment companies: EUR 24,574k

• Total: EUR 36,035k

The **liabilities to banks** essentially include DZ BANK AG (EUR 168k) and Sparkasse Westmünsterland (EUR 168k), where a drilling rig has been used as security in accordance with standard banking practice and to Sparkasse Südliche Weinstraße (EUR 1,754k), which are secured by mortgages and other customary securities. Liabilities amounting to EUR 8,903k from the use of overdraft loans.

There is a qualified subordination agreement attached to the liabilities to minority shareholders and interest has been deferred until 2019.

The other liabilities towards pension funds are owed to the Ärzteversorgung Westfalen-Lippe and are used to finance geothermal projects. The loan has a term until 30/06/2022. Collateral security is provided by a pledge of limited partnership shares in GeoEnergie Taufkirchen GmbH & Co. KG. Other **liabilities to investment companies** exist for Green Utility Projects Germany III GmbH & Co. KG and are used to finance the share acquisition of GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald. The Ioan has a term until 01/12/2032. The interest rate is 3.5 % per year. Collateral security is provided by a pledge of limited partnership shares in GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald.

The other liabilities for share acquisition include the last purchase price instalment (EUR 3,416k) payable to Axpo Power AG from the purchase of the shares in GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald. The payment is due on 30/06/2019.

The other liabilities comprise liabilities from wages and salaries (EUR 350k), liabilities from social security (EUR 69k) and other liabilities (EUR 1,721k).

The **deferred tax liabilities** (EUR 4,883k) mainly result from the disclosure of hidden reserves in the framework of initial consolidation of GeoEnergie Taufkirchen GmbH & Co. KG.



# **II. INCOME STATEMENT**

The total cost method was chosen for the income statement.

TURNOVER SPREAD BY AREA OF ACTIVITY IN EUR K		Share		Share
Business Unit	2018	in %	2017	in %
Geothermal Energy	31,619	81%	12,441	50%
Raw Materials/Exploration	4,800	12%	5,331	22%
Water Procurement	1,108	3%	4,082	16 %
EDS	1,411	4%	2,904	12%
Total	38,938	100 %	24,758	100 %
TURNOVER SPREAD BY MARKET GEO-				
GRAPHY IN EUR K		Share		Share
Business area	2018	in %	2017	in %
Domestic	12,295	32%	21,134	85%
Foreign	26,643	68%	3,624	15%
Total	38,938	100 %	24,758	100 %

The sales revenues of the Group can be broken down as follows:

Due to the long-term project agreements, the sales revenue only present an incomplete picture of the performance during the fiscal year. Therefore, the overall performance is additionally stated as EUR 27,351 K (corresponding to 78.35 %) at home (previous year: EUR 43,044 K / 59.32 %) and EUR 7,557 K (21.65 %) abroad (previous year: EUR 8,208 K / 24.33 %).

Due to the initial consolidation of GeoEnergie Taufkirchen GmbH & Co. KG, the advance payments made for the power plant as of 31 December 2018 are reported under tangible fixed assets and not under work in progress as in the previous year. The inventory change was therefore corrected accordingly.

Other operating income is broken down as follows:

	2018	2017
<ul> <li>Income from the release of provisions</li> </ul>	EUR 824k	EUR Ok
<ul> <li>Derecognition of old debts</li> </ul>	EUR 279k	EUR Ok
<ul> <li>Reversal of negative goodwill</li> </ul>	EUR Ok	EUR 1,028k
<ul> <li>Insurance compensation</li> </ul>	EUR Ok	EUR 421k
Other income	EUR 418k	EUR 884k
Total	EUR 1,521k	EUR 2,333k

Other operating expenses are broken down as follows:

	2018	2017
Residue and waste disposal	EUR 1,574k	EUR 654k
<ul> <li>Rent for movable property</li> </ul>	EUR 1,060k	EUR 876k
<ul> <li>Legal and consulting fees</li> </ul>	EUR 1,022k	EUR 809k
<ul> <li>Repairs and maintenance</li> </ul>	EUR 910k	EUR 737k
<ul> <li>Advertising, travel, accommoda- tion of staff</li> </ul>	EUR 902k	EUR 995k
<ul> <li>Occupancy costs</li> </ul>	EUR 658k	EUR 635k
<ul> <li>Specific bad debt allowances and</li> </ul>	EUR 654k	EUR 703k
bad debt losses		
<ul> <li>Construction site costs</li> </ul>	EUR 643k	EUR 671k
<ul> <li>Loan brokerage fees</li> </ul>	EUR 600k	EUR Ok
<ul> <li>Vehicle expenses</li> </ul>	EUR 578k	EUR 495k
Insurance policies and contributions	EUR 506k	EUR 478k
Licence fees	EUR 350k	EUR 350k
Workshop costs	EUR 126k	EUR 94k
<ul> <li>Executive management remuneration</li> </ul>	EUR 99k	EUR Ok
<ul> <li>Guarantee commissions</li> </ul>	EUR 93k	EUR 297k
• Other	EUR 1,788	EUR 2,573k
Total	EUR 11,563k	EUR 10,367k



### **III. OTHER DISCLOSURES**

#### **OTHER FINANCIAL OBLIGATIONS**

Daldrup & Söhne AG has other financial obligations arising from rental and lease agreements totalling EUR 578k. The liabilities amount to EUR 170k for terms of up to one year and EUR 408k for terms of one to five years. Moreover there are obligations stemming from a licensing agreement amounting to EUR 4,700k, of which EUR 350k are due within one year, EUR 1,400k within one and five years and EUR 2,950k within more than five years.

In addition, Geothermie Allgäu Betriebs- und Beteiligungs GmbH & Co. KG accounts for EUR 130k. Of these, EUR 10k are liabilities due within one year, EUR 40k are due within 1 to 5 years and the remaining EUR 80k have a term of more than five years.

The total amount of other group financial obligations thus amounts to EUR 5,418k, of which:

- due within one year: EUR 530k
- due between one and five years: EUR 1,559k
- due within more than five years: EUR 3,329k

#### TRANSACTIONS NOT CONTAINED IN THE BALANCE SHEET

In the fiscal year 2016 Daldrup & Söhne AG sold a patent relating to production tubing for use in a borehole heat exchanger for the recovery of geothermal energy and method of installation of such a production tubing for EUR 5,400k and has since been leasing it back for an annual licensing fee of EUR 350k. The patent has a term until January 2034. The advantage of the transaction is to strengthen the profitability of the Company.

#### **CONTINGENT LIABILITIES**

The claim of Daldrup & Söhne AG against a related party arising from the sale of a drilling rig was financed and settled during the reporting period. As part of the financing, Daldrup & Söhne AG has provided a bank with a directly enforceable maximum guarantee to secure the credit claim of EUR 3,000k.

Within the context of the purchase of another 50 % of the shares in geox GmbH by Geysir Europe GmbH from Pfalzwerke Aktiengesellschaft, Daldrup & Söhne AG has acted as guarantor for the purchaser and has provided Landesbank Baden-Württemberg with an **independent guarantee** for 50 % of the amount borrowed for geox GmbH, the purchase price as well as ongoing financial futures transactions. This also included the obligation to make own funds available with regard to a third borehole in Landau which was supported by the German Federal Ministry for the Environment. The total liability for Daldrup & Söhne AG amounts to EUR 1,754k.

It is not reasonably probable that a claim will be made against the guarantee because the geox GmbH geothermal power plant in Landau was put back into operation in 2018 so that the Company will be able to finance the debt service out of its own funds.

Pursuant to section 285, sentence 1 no. 11a of the German Commercial Code (HGB), Daldrup & Söhne AG is the **personally liable shareholder** in the context of involvement in the following joint venture (hereinafter referred to as ARGE):

ARGE "THV Smet-Daldrup", registered office in Dessel (Belgium)
 until 10/2018

No claim is expected to be made under the personal liability, as the joint venture projects have already been successfully completed or are on schedule in terms of contract processing and there are no indications of any claim.



#### FINANCIAL STATEMENT AUDITOR'S TOTAL FEE

The fee for financial statement audit services charged by Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Düsseldorf for fiscal year 2018 is EUR 43k. This is attributable to audits of the financial statements.

### **REPORT ON POST-BALANCE SHEET DATE EVENTS**

The following events took place after the balance sheet date, 31/12/2018, which were of major importance for Daldrup & Söhne AG. Geysir Europe GmbH, Grünwald, acquired the remaining 10 % of the shares in geox GmbH, Ascheberg, from EnergieSüdwest AG, Landau, with substantive effect from 15 January 2019 (UR. No. 598/2018). The Company thus holds a 100 % interest in geox GmbH.

On 29 May 2019, 49.9 % of the shares in geox GmbH were acquired and 48.9 % of the shares of Geysir Europe GmbH were sold to a private investor.

D&S Geothermie GmbH, Grünwald, acquired 480,429 (22.88 %) shares (a total of 2,100,000) in Geysir Europe GmbH, Grünwald, on 1 April 2019 (UR. No. 232/2019). The purchase price amounts to EUR 1,690k and is to be paid in several instalments by 2029 in accordance with the instalment payment agreement.



### **OTHER MANDATORY DISCLOSURES**

### NAMES OF MEMBERS OF THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

During the past fiscal year, the following persons were members of the Management Board :

<b>Name</b> Josef Daldrup	<b>Function, occupation</b> CEO (responsible for the Strategy, Key Accounts, Communications, Personnel, Legal and as a deputy for Controlling and Finance)
DiplGeologe Peter Maasewerd	Member of the Management Board (responsible for the Raw Materials & Exploration, Water Procurement, EDS and Near-Surface & Medium-Depth Geothermal Energy business units and the IT and Contract & Claims Management divisions)
Andreas Tönies	Member of the Management Board (responsible for the Deep Geothermal Energy business unit and the Logistics/Merchandise Management and Purchasing divisions)
Curd Bems (until 15 March 2019):	Member of the Management Board (responsible for Power Plants & Energy)

### The following were members of the Supervisory Board:

Name, function:	Administrative, Management or Supervisory Board appointments or partner positions
Wolfgang Clement, German Federal Minister (ret.) D. Chairman of the Supervisory Board:	Member of the Supervisory Boards of the following companies: • Member of the Supervisory Board for Exaring AG, Munich • Member of the Supervisory Board for Media Broadcast GmbH, Köln
DiplIng. Wolfgang Quecke: Member of the Supervisory Board	Member and/or Managing Director of the following companies: • Managing Director of "terra-concept GmbH", Marl
Joachim Rumstadt Member of the Supervisory Board	<ul> <li>Member and/or Managing Director of the following companies:</li> <li>Chairman of the Management Board, STEAG GmbH, Essen</li> <li>Chairman of the Advisory Board, STEAG EVN Walsum 10 Kraftwerksgesellschaft mbH, Essen</li> <li>Chairman of the Supervisory Board, STEAG New Energies GmbH, Saarbrücken</li> <li>Chairman of the Board Iskenderun Enerji Üretim ve Ticaret A.Ş., Turkey</li> <li>Member of the Advisory Board of Wessling Holding GmbH &amp; Co. KG Altenberge</li> <li>Chairman of the Supervisory Board of Rheinkalk GmbH, Wülfrath</li> </ul>





# REMUNERATION OF MEMBERS OF THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

The total remuneration paid to the Management Board for its work in fiscal year 2018 amounted to EUR 953k.

The total remuneration paid to the Supervisory Board for its work in fiscal year 2018 amounted to EUR 80k.

There is a clearing account with the Chairman of the Management Board, Josef Daldrup, which shows a receivable of EUR 331k as at 31/12/2018. Interest on the clearing account is charged at 6 % annually.

# AVERAGE NUMBER OF STAFF EMPLOYED DURING THE CURRENT YEAR

The following groups of workers were employed on average in the company during the fiscal year:

GROUPS OF STAFF	2018	2017
Labourer	122	118
Salaried employees	33	28
Part-time employees	2	1
Total	157	147

Grünwald, 29 May 2019

Daldrup & Söhne AG The Management Board

Josef Daldrup (CEO)

811111

Peter Maasewerd (Board member)

Later Aming

Andreas Tönies (Management Board)



Appendix 1 to the Notes

### **GROUP STATEMENT OF ASSETS**

### GROUP FIXED ASSETS REPORT FOR FISCAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

			ACQUISITION COSTS		
	As at 01/01/2018 EUR	Currency translation EUR	Additions EUR	Outgoings EUR	As at 31/12/2018 EUR
I. Intangible assets					
Fee-based concessions, industrial property rights and similar rights, assets and values, as well as licenses for such rights and assets	7,198,085.20	0.00	2,240,981.80	142,000.44	9,297,066.56
	7,198,085.20	0.00	2,240,981.80	142,000.44	9,297,066.56
II. Property, plant and equipment					
<ol> <li>Land, land rights and buildings including buildings on third-party land</li> </ol>	2,850,389.99	-1,777.46	2,678,433.35	35,000.00	5,492,045.88
2. Technical equipment and machinery	39,853,063.03	0.00	589,517.44	165,913.83	40,276,666.64
<ol> <li>Other equipment, operating and office equipment</li> </ol>	14,219,551.32	0.00	423,529.09	19,129.34	14,623,951.07
4. Prepayments and assets under construction	15,433,400.44	0.00	77,413,605.08	80,535.00	92,766,470.52
	72,356,404.78	- 1,777.46	81,105,084.96	300,578.17	153,159,134.11
III. Financial assets					
1. Shares in associates	23,233,426.27	0.00	10,000.00	21,870,934.23	1,372,492.04
2. Long-term securities	95,054.80	0.00	0.00	0.00	95,054.80
3. Other loans	1,152,843.90	0.00	0.00	168,916.00	983,927.90
	24,481,324.97	0.00	10,000.00	22,039,850.23	2,451,474.74
	104,035,814.95	- 1,777.46	83,356,066.76	22,482,428.84	164,907,675.41

BOO	k va	LUES
As at 31/12/2018 EUR		As at 31/12/2017 EUR
2,768,196.67		691,709.61
2,768,196.67		691,709.61
4,284,715.94		1,752,332.81
20,171,594.01		22,712,262.83
2,565,469.69		2,829,372.90
85,871,497.09		8,551,272.01
112,893,276.73		35,845,240.55
10,000.00		21,870,934.23
181.00		181.00
981,095.04		1,150,011.04
991,276.04		23,021,126.27
116,652,749.44		59,558,077.43

	DEPRECIATION	AND	AMORTISATION	
As at 01/01/2018 EUR	Additions EUR		Outgoings EUR	As at 31/12/2018 EUR
6,506,375.59	112,620.05		90,125.75	6,528,869.89
6,506,375.59	112,620.05		90,125.75	6,528,869.89
1,098,057.18	110,680.76		1,408.00	1,207,329.94
17,140,800.20	2,964,272.43		0.00	20,105,072.63
11,390,178.42	679,277.80		10,974.84	12,058,481.38
6,882,128.43	12,845.00		0.00	6,894,973.43
36,511,164.23	3,767,075.99		12,382.84	40,265,857.38
1,362,492.04	0.00		0.00	1,362,492.04
94,873.80	0.00		0.00	94,873.80
2,832.86	0.00		0.00	2,832.86
1,460,198.70	0.00		0.00	1,460,198.70
44,477,738.52	3,879,696.04		102,508.59	48,254,925.97



Appendix 2 to the notes

## SHAREHOLDINGS

### LIST OF SHAREHOLDINGS PURSUANT TO SECTION 285 (11) HGB FOR THE FISCAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

NAME AND REGISTERED OFFICE OF THE COMPANY	Capital Direct	Capital Indirect	Equity	Result	Currency	Year	Exchange rate 31/12/2018 1 EUR =
Daldrup Bohrtechnik AG, Baar/Switzerland	100.00		1,266,621.89	739,365.15	CHF	2018	1.293 CHF
D&S Geothermie GmbH, Grünwald	100.00		761,160.60	47,999.62	EUR	2018	
Daldrup Wassertechnik GmbH, Ascheberg	100.00		61,796.81	13,786.43	EUR	2018	
Przedsiebiorstwo Projektow Gorniczych i Wiercen Geologicznych "DMM" Sp. z o.o., Katowice/Poland	50.44		1,949,153.13	694,129.36	PLN	2018	4.290 PLN
GERF B.V., 's-Gravenzande/Netherlands		100.00	- 649,167.00	- 379,486.00	EUR	2018	
Geysir Europe GmbH, Grünwald		75.01	8,044,913.47	- 1,267,670.74	EUR	2018	
Exorka GmbH, Grünwald		100.00	- 132,498.47	- 264,400.55	EUR	2018	
Exorka ehf, Husavik/Iceland		100.00	- 520,137,083.00	- 33,040,636.00	ISK	2018	134.21 ISK
geox GmbH, Ascheberg		90.00	- 6,164,358.11	- 659,349.35	EUR	2018	
Geothermie Allgäu Betriebs- und Beteiligungs GmbH & Co. KG, Grünwald		100.00	- 12,802,568.94	- 280,673.46	EUR	2018	
Geothermie Allgäu Verwaltungs GmbH, Grünwald		100.00	- 5,597.53	- 2,715.85	EUR	2018	
Geothermie Starnberg GmbH & Co. KG, Grünwald		100.00	174,863.73	- 14,896.10	EUR	2018	
Geothermie Taufkirchen GmbH & Co. KG, Grünwald		100.00	- 1,067,161.57	- 1,163,774.10	EUR	2018	
Geothermie Starnberg Verwaltungs GmbH, Grünwald		100.00	- 6,274.37	- 716.39	EUR	2018	
Erdwärme Taufkirchen GmbH & Co. KG, Grünwald		100.00	- 155,332.36	- 16,159.03	EUR	2018	
Erdwärme Taufkirchen Verwaltungs GmbH, Grünwald		100.00	11,274.09	- 1,686.91	EUR	2018	
GeoEnergie Taufkirchen GmbH & Co. KG, Grünwald		73.61	62,699,879.70	- 616,675.11	EUR	2018	
GeoEnergie Taufkirchen Verwaltungs GmbH, Grünwald		73.83	2,109.19	- 706.87	EUR	2018	
Taufkirchen Holding GmbH & Co. KG, Grünwald		100.00	12,673,916.21	- 564,362.67	EUR	2018	
Taufkirchen Holding Verwaltungs GmbH, Grünwald		100.00	- 311.35	- 1,912.32	EUR	2018	
Geothermie Neuried GmbH & Co. KG, Neuried		100.00	- 76,505.62	- 36,723.90	EUR	2018	
Geothermie Neuried Verwaltungs GmbH, Neuried		100.00	- 6,502.78	- 2,791.36	EUR	2018	



### **INDEPENDENT AUDITOR'S REPORT**

To the Daldrup & Söhne AG, Grünwald:

### AUDIT OPINIONS

We have audited the consolidated financial statements of Daldrup & Söhne AG, Grünwald, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2018, the consolidated income statement, consolidated equity statement and consolidated cash flow statement for the financial year from 1 January 2018 to 31 December 2018, and notes to the consolidated financial statements, including the presentation of the recognition and measurement policies. In addition, we have audited the group management report of Daldrup & Söhne AG, Grünwald, for the financial year from 1 January 2018 to 31 December 2018.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the requirements of German commercial law and give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2018 and of its financial performance for the financial year from 1 January 2018 to 31 December 2018 in compliance with German Legally Required Accounting Principles, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to section 322 paragraph 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

### **BASIS FOR THE AUDIT OPINIONS**

We conducted our audit of the consolidated financial statements and of the group management report in accordance with section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

#### **OTHER INFORMATION**

The executive directors are responsible for the other information. The other information comprises the remaining parts of the annual report, with the exception of the audited consolidated financial statements and group management report and our auditor's report, which is expected to be made available to us after the date of this auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

When we read the remaining parts of the annual report, with the exception of the audited consolidated financial statements and group management report and our auditor's report, if we conclude that there is a material misstatement therein, we are required to communicate the matter with those charged with governance.

### RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with the requirements of German commercial law and that the consolidated financial statements, in compliance with German Legally Required Accounting Principles, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting provided no actual or legal circumstances conflict therewith.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

### AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report. We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use
  of the going concern basis of accounting and, based on the audit
  evidence obtained, whether a material uncertainty exists related to
  events or conditions that may cast significant doubt on the Group's
  ability to continue as a going concern. If we conclude that a material
  uncertainty exists, we are required to draw attention in the auditor's
  report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures
  are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of
  our auditor's report. However, future events or conditions may
  cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

Düsseldorf, 29 May 2019

Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft

Michael Häger Wirtschaftsprüfer (German Public Auditor) Carsten Carstens Wirtschaftsprüfer (German Public Auditor)

### FISCAL CALENDAR for Daldrup & Söhne AG

31 May 2019:	Consolidated Annual Report as at 31/12/2018
22 August 2019:	Annual General Meeting, Munich
30 September 2019:	Consolidated Interim Report as at 30/06/2019
25-27 November 2019:	Equity Forum, Frankfurt

## **INVESTOR RELATIONS** Contact

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## IMPRINT

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### Design and setting

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