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# Bavarian Nordic and Corporate Social Responsibility

At Bavarian Nordic, we contribute to a healthier, safer and more secure society through the development and manufacture of innovative vaccines for prevention and treatment of life-threatening diseases where there are currently unmet medical treatment needs.

In this way, our products can help make a difference for people both healthy and ill. Part of the Company works in the field of biodefence<sup>1</sup>, i.e. the development and production of vaccines for protection against acts of bioterrorism. Should the worst-case scenario come true, this work could help save the lives of many people. The other part of the Company works to develop vaccines for the treatment of cancer patients. Through our research, we wish to continue to contribute to human health through the development of new vaccines.

We feel it is very much our responsibility to supply products of very high quality: our quality management system ensures consumers products that are safe, pure and effective. The pharmaceutical industry works according to the rules of Good Manufacturing Practice, or GMP. GMP includes strict requirements with respect to a product's traceability, strength, quality and purity, which means that quality control has to be built into each step of the manufacturing process. GMP rules are laid down by the Danish, European and American health authorities. Bavarian Nordic supplies these markets and thus complies with these quality requirements. Product safety is crucial in our business, and quality and responsibility have been built into our systems and our entire corporate culture.

As a result of a targeted effort, initiated in 2010, to systematise our work with corporate social responsibility (CSR), we now have an actual general CSR policy which includes policies in the areas we have deemed vital to our work.

#### Report structure

This CSR report is part of the annual report's management statement as signed and approved by the Board of Directors and Corporate Management on 10 March 2011.

This is the second CSR report to be issued by the Company, so it includes a follow-up on the goals we set for ourselves in 2009.

Just like last year's document, this CSR report was inspired by elements from the Global Reporting Initiative (GRI)<sup>2</sup>, a recognised framework for reports on sustainability. The GRI structure includes principles and indicators used to measure and explain financial, environmental and social performance. We have added more GRI indicators to this 2010 CSR report and will also in future strive to expand our reporting, but only in those fields which are directly or indirectly related to the future development of the Company's business and activities.

We have defined our work with social responsibility on the basis of a number of stakeholder groups and will, as we did in 2009, continue to concentrate on the environment, our employees and our suppliers. We take our starting point in our previous environmental reporting, which has been in the form of the green accounts we have published since 2005, when our production facility in the town of Kvistgård opened. Going forward, we will look at whether it is relevant to include other stakeholders.

Bavarian Nordic has offices and facilities in six different locations across four different countries. Local differences in statistical methods and regulatory requirements regarding data on environment, health and safety, working hours, absence, etc. make it difficult to provide uniform reporting across the Group within certain of the areas we include in this report. We worked on this challenge in 2010, and as a result we were able to include more of our facilities in this report, but we also found that we had to make minor changes to the methods used in some of our calculations. The figures for 2009 have been adjusted in this respect to provide a fair basis for comparison.

<sup>&</sup>lt;sup>1</sup> Protection against biological terrorism

<sup>&</sup>lt;sup>2</sup> http://www.globalreporting.org

# Key figures

Our reporting was primarily focused on our largest facilities: Kvistgård (industrial production, quality control laboratories, technical services and administration), Martinsried (research and development), Berlin (production of clinical trial materials) and Mountain View (research and development). Taken together,

these facilities employ more than 98% of the Group's employees and consume by far the greatest amount of energy. The remaining facilities are offices facilities only and thus of minor importance in this respect.

	Year	Total	Kvistgård	Martinsried	Berlin	<b>Mountain View</b>	Washington	Singapore
Carbon Footprint (tCO <sub>2</sub> )	2010	3,382	Χ	Χ	Χ	Χ	-	-
	2009	2,631	Х	Х	-	-	-	-
		(2,543)						
Work accident rate*	2010	7.6	Χ	Χ	Χ	Χ	Х	Χ
	2009	15.2	Х	Х	Х	Х	Х	Х
		(15.0)						
Absence (leave not included)	2010	4.6%	Χ	Х	Χ	*	*	-
	2009	4.6%	Х	Х	Х	*	*	-
		(4.9%)						
Average number of	2010	377	206	128		37	4	2
full-time employees	2009	337	176	101	26	28	4	2
		(340)	(177)			(30)		

X = Included in key figures calculations.

<sup>\*</sup> Number of accidents per million working hours.

<sup>()</sup> From the 2009 CSR report. The figures for work-related accident rate and absence have been adjusted due to changes in calculation methods, also to include a more correct specification of data. The carbon footprint figure has been adjusted to correct for incorrectly stated heating consumption data for Martinsried and to account for oil used in an emergency generator at Kvistgård.

<sup>\*</sup> The Group's USA sites work with figures for total absence only and do not divide it into types, which makes it impossible to state absence due to illness as a separate category.

### CSR policies

We have most recently drafted corporate social responsibility (CSR) policies in 2010. These policies are a natural extension of the goals and targets we work towards as a company.

#### **General CSR policy**

Bavarian Nordic develops and manufactures vaccines for the prevention and treatment of life-threatening diseases where there are as yet unmet needs. In doing so, we seek to create a continuing business that will ensure the Company's growth and investment in research and development and thus continue to contribute to a healthier and safer society. At the same time, we focus on working and acting responsibly with respect to the world we live in. We aim to do this by:

- · manufacturing high-quality vaccines.
- working actively to minimise our impact on the environment and climate.
- · maintaining an active dialogue with our stakeholders on a local, national and global level.
- providing a safe and healthy working environment for our staff that includes opportunities for professional and personal devel-
- · communicating our CSR policy to external collaboration partners, including our suppliers.

Our goals in the environment, health and safety field are specified in greater detail in our environmental and occupational health and safety policies.

#### **Environmental policy**

At Bavarian Nordic, we design our vaccine production facilities and procedures so that there is no risk of viruses escaping into the indoor or outdoor environment, not into via through the air, our waste or our wastewater. We at Bavarian Nordic work continually on improving our environmental efforts our efforts to improve the environment and minimise our environmental impact. Our aims are:

- to encourage environmentally aware behaviour and prevent contamination and pollution throughout the Company
- to reduce our environmental impact by
  - developing and using processes that have a minimum of environmental impact
  - · optimising our utilisation of materials and energy
  - reducing emissions and waste
- to comply with environmental protection regulations and relevant requirements
- · to gradually build an environmental management system based on the principles in the ISO 14001 standard

#### Health and safety

A safe and healthy working environment is important for employee safety and satisfaction at the workplace. We always comply with the applicable rules and regulations in this field and focus on systematically mapping both physical and mental working environment so that the necessary preventive steps can be taken for the benefit of individual employees as well as the Company as a whole. The aims of our general health and safety policy are:

- · to promote awareness of health- and safety-related behaviour in all staff as part of their day-to-day work and work towards proactive solutions to potential problems
- to gradually develop a management system to facilitate this proactive safety work

#### **Suppliers policy**

We do not as yet have an actual suppliers policy on social responsibility. Instead, we have laid out a policy for the communication of our position on social responsibility to our suppliers.





### Environment

The environment is important to us at Bavarian Nordic. When we built our factory in the Danish town of Kvistgård in 2005, we had a great deal of focus on reducing our environmental impact. Since then, we have continually been working to minimise our environmental impact and to actively incorporate environmental, health and safety planning into our building projects.

We implemented a number of environmental savings in 2010. Among other things, we replaced an older, oversized steam boiler with two smaller boilers better suited to the needs of our production facility. A project to build a new process laboratory has also begun: part of the planning involves looking at possible water and energy savings in the larger-scale process equipment. Relevant measures will be implemented as planning progresses.

Since our Kvistgård factory began operations in 2005, we have published annual 'green accounts' containing environment-related information that includes data on the Kvistgård facility's energy and water consumption, emissions and waste. These green accounts are prepared in accordance with Danish law and can be downloaded from the Bayarian Nordic website.

We are also aware of the importance of maintaining a good dialogue with our neighbours. When Bavarian Nordic established a presence in Kvistgård, we invited our neighbours to an information meeting, just as our neighbours and the public in general were involved through two consultation exercises held in connection with the environmental assessment process. We also completed several projects based on suggestions from our

### Carbon footprint calculated for 2010 and 2009

					Mountain				
	Kvis	Kvistgård		Martinsried		View	Total		
Greenhouse gas emissions (tCO <sub>2</sub> )	2010	2009	2010	2009	2010	2010	2009	2010	
Direct emissions									
Heating	1,056	881	0	0	0	20			
Electricity generation	1***	1***				2			
Fugitive emissions	4	6	0	0	0	0			
Transport (motor vehicles)	58	60	14	8	0	0			
Indirect emissions									
Electrical power, purchased	1,379	1,200	338	294	158**	10			
Heating, purchased	0	0	185	180*	156**	0			
Cooling, purchased	0	0	0	0	0	0			
Total greenhouse gas emissions (tCO)	2,498	2,149	537	482	314	32	2,631	3,381	

#### tCO<sub>2</sub>: Tonnes of CO<sub>2</sub> or equivalent gasses.

- \* Heating was stated incorrectly in the 2009 statement, both with respect to consumption and emissions type (direct). The figures above have been corrected and thus deviate from the figures stated in the 2009 report.
- \*\* Part of the electrical power and heating consumption figure for Berlin is estimated: some of the rooms of this facility are part of a larger building used by several businesses, and heating and power consumption is charged only indirectly, as part of the rent. An estimated total figure was, however, calculated based on metered energy consumption from the facility's other building.
- \*\*\* Estimate based on oil deliveries made every five years. This estimate was not included in the 2009 report.

neighbours. In our daily work, we are occasionally in contact with our neighbours, especially in matters to do with noise, which is what affects them most directly. Also because of this contact, we are aware of the impact we can have in connection with both our production and our construction projects.

We have decided to integrate parts of our green accounts into our CSR report, and to that end have prepared a 'carbon footprint' statement that specifies our greenhouse gas (carbon) emissions.

#### Carbon footprint

We have prepared carbon footprint statements for 2009 and 2010: a carbon footprint statement specifies the energy consumed by the Company and its emissions expressed in tonnes of CO<sub>2</sub> (tCO<sub>2</sub>), and it includes several GRI indicators.

In our 2009 statement, the carbon footprint was calculated only for the Company's largest facilities, i.e. Kvistgård and Martinsried. The carbon footprint statement for 2010 includes two more: Berlin and Mountain View. These four facilities employ a total of just over 98% of all Bavarian Nordic staff and presumably account for most of the Group's energy consumption by far, as our other sites are only small office facilities.

Table 1 shows the CO<sub>2</sub> emissions calculated for Bavarian Nordic for 2010 and 2009. Greenhouse gas emissions in 2010 totalled approximately 3400 tonnes of CO<sub>2</sub> versus roughly 2600 tonnes in 2009. The increase is partly due to the fact that the Mountain View and Berlin facilities are included in the 2010 calculations, but it is also due to increases of 16% and 11% in emissions from Kvistgård and Martinsried respectively. Kvistgård's increase is due to a slight rise in production, the start-up of a new quality control laboratory, a larger number of staff employed, and more electrical power used due to building activities. The increase at Martinsried is the result of a few cold months at the beginning and end of the year raising heating consumption as well as more electrical equipment at the site.

The total emissions figure of 3400 tonnes of CO<sub>2</sub> corresponds to the emissions produced by roughly 260 Danish households<sup>3</sup>.

CO, emissions are expected to rise further in 2011 as a result of a planned increase in manufacturing activities, and production is scheduled to expand by more than 100% over the course of the year. We generally expect production to vary from year to year, which is why our primary focus will be on reducing our relative environmental and climate impact. As early as this year, we will be taking a closer look at the relevant key figures to find a way to measure our relative impact.

Since Kvistgård accounts for all the Company's industrial production and much of its laboratory activities, it is also this facility that contributes most to the Company's total carbon footprint. The largest sources of emissions at the Kvistgård facility are its electrical power consumption and its use of natural gas for heating. The power is used to run ventilation systems, a refrigeration compressor, process equipment, refrigerators, freezers, air compressors, office equipment and lighting; the natural gas is used for heating and steam production.

#### Goals

We set ourselves a goal for 2010 to include more of the Company's facilities in our calculation of the Group's CO<sub>2</sub> emissions, and we fulfilled this goal by including our Mountain View and Berlin facilities in calculating our 2010 carbon footprint. The remaining facilities - in Washington and Singapore - are small office facilities that account for less than 2% of the total Company headcount. Their contribution to our carbon emissions total is insignificant, and that is why we have decided to omit them from our carbon footprint calculations, also in future.

We have used the data on which our carbon footprint calculations are based to set a starting point for our climate impact, which then allows us to set goals to reduce that impact. In coming years, we will be working with our relative impact based on relevant key figures.

We will in 2011-2014 endeavour to reduce our relative environmental and climate impact. More specifically, we will be able to analyse our data in 2011 and determine certain relative key figures on this basis.

### **Employees**

An organisation in a constant process of development, faces certain demands. For this reason, we put a great deal of effort into forming a shared corporate culture which includes building up systems for the sharing of information and know-how.

In just a few years, Bavarian Nordic has transformed itself from a purely research- and knowledge-based business into a business that today has its own manufacturing facilities. This process brought with it both a major change in staff composition and a significant increase in the number of employees. When an organisation is in a constant process of development, as we are, it faces certain demands. For this reason, we at Bavarian Nordic put a great deal of effort into forming a shared corporate culture which includes building up systems for the sharing of information and know-how.

Since we have also maintained a flat management structure over the years, the rising number of employees also means that middle managers are responsible for larger groups of staff. For this reason, we have been focusing on training primarily our mid-level managers to prepare them for the new challenges they face.

We are an innovative knowledge-based company, and it is crucial that we are able to attract and retain highly qualified workers. Also for this reason, we want to offer our staff a good working environment that also provides them with development opportunities. There are plentiful opportunities at Bavarian Nordic, both for development within a field of work by rotation between production, laboratory and office jobs or for development vertically within the management hierarchy. As a result, we are happy to recruit internally, and we focus on staff development potential in our annual employee performance reviews.

At Bavarian Nordic we strive towards a good, healthy balance between work and time off work. We work actively with stress, emphasising awareness of stress indicators on a day-to-day level as well as offering help to handle stress as needed. We have been working actively for several years on dialogue-based sickness absence management, ahead of legislative trends. We generally achieve a quicker return to work by tackling each case individually, also including an option to return to work part-time at first.

All staff at Kvistgård are included in our corporate health insurance policy, which ensures fast and professional help and treatment at private hospitals and from psychologists, chiropractors, physiotherapists, etc., should the need arise.

Social activities are an important factor in a balanced work life, which is why we focus on the social interactivity between employees and employee groups. At Kvistgård, there is an active staff association that regularly implements, with the backing of management, new initiatives that cater for the various interests employees may have.

#### A good, safe working environment

We must always ensure that Company employees can do their jobs under safe and secure conditions, and we work continually to optimise work safety.

The number of work-related accidents was down in 2010 from both 2008 and 2009 levels, corresponding to an accident rate of 7.6<sup>4</sup> for the entire Group in 2010, versus a rate of 15.2 in 2009<sup>5</sup>. This is a substantially lower rate than the general accident rate among Danish firms, which was 20.9<sup>6</sup> in 2009.

Only five work-related accidents were reported in 2010, compared with nine in 2009. Of these five, four occurred at Kvistgård and one at Berlin. Three of the accidents were among production workers, two of which were due to incorrect lifting technique. The accident at the Berlin facility was a fall. In all cases, the accidents caused minor injuries that gave rise to less than a week's absence from work.

The Company's occupational health and safety work varies to comply with different countries' regulatory requirements. At Kvistgård, workplace assessments are used regularly to chart health and safety factors, and relevant improvement initiatives based on these assessments are put forward, prioritised and translated into an action plan. In compliance with Danish regulations, a number of health and safety groups and one health and safety committee are appointed that have both management and worker representatives. Regular committee meetings are held over the course of the year at which members follow up on action plans in order to improve working conditions and safety.

The focus areas for Kvistgård in 2010 were regular health and safety inspections, uncomfortable work positions in the production group, noise mapping plus a possible action plan, and reducing work-related falls. These initiatives have either been launched or completed. It should be noted that the number of

<sup>&</sup>lt;sup>4</sup> The accident rate is the number of accidents per million working hours

 $<sup>^{\</sup>mbox{\tiny 5}}$  This figure was calculated for the entire Bavarian Nordic Group

<sup>&</sup>lt;sup>6</sup> Confederation of Danish Industry, Arbejdsulykker ('Work-related accidents'), from its 2009 company statistics

falls have dropped to zero at Kvistgård, which is due to special efforts in this area. The fall incidents from 2009 were analysed to find the cause of the accidents, and this resulted in various preventive measures being taken, e.g. changing floor cleaning agents. The noise problems were solved by moving staff from the noisy rooms and using the rooms as something other than office space.

Workplace assessments will be conducted at Kvistgård in 2011 and used to find relevant areas for action.

#### Goals

Our goal in 2010 was to continue to minimise the number of work-related accidents through preventive measures, with a special focus on those areas in which most accidents happened.

The number of work-related accidents was down 44% in 2010 compared with the year before. A special focus on falling accidents at Kvistgård made it possible to cut the number of falls to zero at this facility. As described above, this was achieved by analysing the reasons behind the various fall incidents and then implementing various measures based on this analysis.

We believe that the number of work-related accidents has reached a minimum level now, and our goal for the future is thus to maintain a correspondingly low level in 2011, knowing full well that this will require a special effort. The year 2011 will see the introduction of a relatively large number of new production staff, so we are focused on providing a good training programme for them to minimise the risk of work-related accidents.

#### **Absence**

The total absence at Bavarian Nordic for 2010 was an average of 10 days per employee<sup>7</sup>, corresponding to an absence rate of 4.6%<sup>8</sup>, which is on a par with the rate for 2009. The average absence measured for the pharmaceutical industry in Denmark is 6.6% (2009 figures)<sup>9</sup>. There was a significant drop in number of sick days at our German locations, Berlin and Martinsried, which was due to a drop in long-term illness of roughly 27%. This drop was, however, offset by an increase in number of sick days at Kvistgård, where a greater focus on registering absence has resulted in more valid data.

Absence registration at the various Company locations is not yet standardised across the Group, and in practice such records are actually only kept at our European sites. In the United States, a 'paid-time-off' (PTO) scheme is used, which means that employees have the right to take a certain number of days off, including sick days, without these days being recorded as sick days.





- <sup>7</sup> Calculated as the total number of sick days divided by the number of fulltime employees
- <sup>8</sup> Includes employees at Kvistgård, Martinsried and Berlin
- <sup>9</sup> Confederation of Danish Industry, Fraværsstatistik ('Absence statistics'), 2009

We are continuing to work towards implementing an effective system and preparing uniform guidelines for absence registration at the various Group sites that do register it, but we are not trying to include all the Company locations in this effort, as local agreements - such as the PTO scheme in the USA - make this impossible.

#### Gnals

In our 2009 report, we set a goal for the next few years to implement an effective system and draft uniform guidelines for registering absence across the Group.

We began developing this system in 2010. Kvistgård started a pilot project in its manufacturing section with the implementation of Shop Floor Control, an IT system that allows absence to be registered directly in our ERP system<sup>10</sup>. We will be running a corresponding pilot project in selected office units in 2011. If these pilot projects are successful, the plan is first to implement the system for the entire organisation at Kvistgård and then look at how the system can be implemented throughout the Group, also taking into account the specific legislation in effect in the different countries.

Since we are still actively working on the project, and since it is a project that will take some time to run, we are maintaining our goal from 2009.

#### Personal and organisational development

Excellent opportunities for development are not alone vital in ensuring the recruitment and retention of highly qualified employees; they are also necessary if employees are to exploit their full potential and thus ensure the competitive ability of the Company.

It is crucial that our employees have the necessary tools and techniques to perform well in their jobs now and in future. Our annual employee performance reviews are thus followed up on and adjusted to meet current and actual needs. Naturally, we comply with the strict requirements with respect to continuing education and skills upgrading that stem from industry regulations, national laws and collective agreements, but we have no set target number of hours of training per employee. Our goal is, as a minimum, for our workers and managers to always have the skills to look for and find their own job.

#### Goals

In our 2009 CSR report, we set ourselves the goal of looking into the possibility of establishing a centralised system for the registration of continuing training activities and qualifications upgrades.

Against this backdrop, we are planning the launch of a pilot project in 2011 to assess how we can best register and track continuing training and education using our ERP system. Once the options and possibilities with respect to this system have been determined, the project will be implemented in a small part of the organisation to start with.

### Suppliers

As an integrated element of Bavarian Nordic's CSR policy, we wish to lay down a number of guidelines for our collaboration with raw materials suppliers.

In accordance with Good Manufacturing Practice (GMP) and our own current supplier management system, all raw materials suppliers will have to be audited before final supply contracts can be signed. This allows us a unique opportunity to witness and also have an impact on our suppliers' involvement in and commitment to socially responsible activities.

One of our goals in 2010 was to set up assessment criteria for our suppliers, and we analysed our main supplier data. Bavarian Nordic primarily purchases raw materials from suppliers in North America and the EU, and these countries have public regulatory authorities that monitor social and environmental parameters. Against this backdrop, we want to make social responsibility part of the purchasing process by informing potential suppliers about the Company's values in our contracts through our CSR policies, including our environmental, health and safety policies.

New potential suppliers will also be evaluated with respect to their geographical location and thus risk, a an assessment will be made as to whether any action is necessary. It is our intention to carry out, in 2011, a more thorough risk assessment of relevant and important suppliers and to evaluate, on the basis of fixed criteria, whether expanded efforts are needed.

The above will be implemented in our systems after determining the relevant procedures.

#### Goals

It was our intention in 2010 to set a goal for establishing a system for evaluating raw materials suppliers on their social responsibility, also taking into account environmental factors.

Work to establish this system began as early as in 2010 when we, first, evaluated the risk of the various facilities relative to their geographical locations and, second, began implementing our social responsibility values in our contracts. Work to set up this system will continue in 2011.





## Auditor's report

### To the Group management of Bavarian Nordic A/S

We have performed a review of Bavarian Nordic's report on corporate social responsibility 2010 ("the Report"). The purpose of our review was to submit a statement here on. The management of the company is responsible for the Report. Our responsibility is to provide a conclusion based on our review of the Report.

#### The performed review

We have performed our review in accordance with the Danish auditing standard on assurance engagements ("RS 3000 Assurance engagements other than audits or reviews of historical financial information"). It has been our purpose to obtain limited assurance that the data at Group level presented in the Report are in accordance with the described reporting practice and information reported to headquarters from production sites and other business units. By agreement we have reviewed data at Kvistgaard on a sample basis, but we have not reviewed the data at other production sites and business units.

Our review is based on an evaluation of risk of material errors. We have evaluated the reporting practice and analyzed correlations with the company's activities. The review is limited to first

of all include inquiries from management and employees as well as analytical procedures, and a limited level of assurance is thus lower than the assurance which would have been obtained if we had performed an audit.

#### Conclusion

During our review, nothing came to our attention that caused us to believe that the data at Group level overall are not in accordance with the described reporting principles and practice and information reported from production sites and other business units.

Copenhagen, 10th March 2011

Deloitte Statsautoriseret Revisionsaktieselskab

Preben J. Sørensen State-authorised Public Accountant

### Reporting principles and practice

This CSR report was prepared in accordance with Danish Financial Statements Act requirements with respect to corporate social responsibility reporting.

The report was inspired by parts of the Global Reporting Initiative (GRI), a recognised framework for sustainability reports. The GRI structure includes principles and indicators which we used to measure and explain the Company's financial, environmental and social performance. We do not use the GRI as a checklist, but as a continued source of inspiration in our reporting.

Our selection of the areas to be reported on was based on a principle of materiality: we endeavour to include the most important ways in which the Company has an either direct or indirect impact upon the world around it. Our manufacturing facilities are one of the chief sources of our impact on the environment, and by calculating our carbon footprint, which is included both in this report and in our annually published green accounts, we strive towards a high degree of transparency in reporting our environmental impact.

Our production operations and the activities derived from them (e.g. quality control laboratories) are also the primary source of our raw materials consumption, which is why we consider it relevant to include them in this CSR report. Social responsibility aspects are not included in the already extensive audits we conduct today, but we will be integrating this into our purchasing process in 2011, through our contracts.

We included more of the Company's sites in our carbon footprint calculation in 2010. With respect to absence registration, we are currently working on an electronic solution that will in the long term encompass as much of the Group as possible. However, we will not be able to include our Mountain View and Washington sites, as there are certain regulatory aspects which, as mentioned above, make it impossible to record worker absence data. On the whole, the most important facilities are included, and they account for the great majority of employees and by far the greatest proportion of the total amount of energy consumed by the Company.

#### Carbon Footprint

#### Setting a starting point

Our carbon footprint calculations are based on the standard and recommendations of the Greenhouse Gas Protocol Initiative<sup>11</sup> for calculating an organisation's total carbon emissions, which include the six greenhouse gasses addressed by the Kyoto Protocol - CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub> - calculated in tonnes of CO<sub>2</sub> equivalents. Emissions sources are divided into three scopes: direct emissions from activities under the Company's control (Scope 1), emissions from the consumption of electrical power (Scope 2) and indirect emissions from products and services (Scope 3). According to the recommendations, organisations should report on Scope 1 and Scope 2 as a minimum, and this is what we have decided to do in our carbon footprint statement.

We calculated the total carbon emissions from our locations at Kvistgård, Martinsried, Berlin and Mountain View with a view to establishing a starting point for four different types of emissions:

#### Consumption of natural gas and oil

This figure is based primarily on current consumption as measured by monthly meter readings. Oil used for emergency generators, however, is estimated on the basis of oil consumption over a five-year-period. Greenhouse gas emissions from the combustion of fossil fuels are calculated on the basis of an average emission factor.

#### Fugitive emissions

Fugitive emissions include CO<sub>2</sub> from the use of dry ice and CO<sub>2</sub> gas plus greenhouse gasses emissions from cooling and refrigeration systems.

#### Power consumption

Electrical power consumption is based on meter readings recorded at the end of 2010. The calculation of greenhouse gas emissions from electrical power consumption is based on specific emission factors provided by the power company and an average emission factor for the generation of power in Germany.

#### Mileage (km)

This figure is calculated on the basis of receipts from petrol companies and includes motor vehicles both owned and leased by the Company. Greenhouse gas emissions are calculated on the basis of an average fuel-specific emission factor for ordinary cars in Denmark and Germany.

#### Emission factors

For calculating the  $\mathrm{CO_2}$  emission, specific emission factors are applied by type of emission and geographic location. The  $\mathrm{CO_2}$  emission from combustion of natural gas, oil, petrol and diesel and fugitive emissions are assessed as having a global effect and only minor local differences. The emission factors from these sources are based on data from the Danish Ministry of Climate and Energy<sup>12</sup>. However the emission factor for natural gas from the Mountain View facility is based on figures from The Pacific Gas and Electric Company<sup>13</sup>, a supplier of natural gas and electricity in California.

Emissions for locally-procured electricity have been determined from local factors. Thus, emission factors for Kvistgård are based on factors for Eastern Denmark<sup>14</sup>. The emission calculations for electricity in Mountain View are based on emission factors from The Pacific Gas and Electric Company<sup>15</sup>. The emission calculations for electricity procured in Germany are based on general German emission factors<sup>16</sup>, whereas the emission calculations for district heating procured in Germany are based on emission factors published by the German Heat & Power Association - AGFW - e. V.<sup>17</sup>

#### **Absence**

Absence data for 2010 only cover Bavarian Nordic staff at our Kvistgård, Martinsried and Berlin sites, and include registration of staff sick days, child sick days, hospital visits and admissions, and absence as a result of work-related accidents. Leave – also maternity and paternity leave – is not included in these figures.

The absence rate was calculated by taking the average annual number of full-time employees times the number of working days, divided by the number of total days of absence.

#### **Accidents**

Work-related accident data is for the entire Bavarian Nordic Group; only accidents resulting in more than one day of absence are included. The definition of 'work-related accident' in Danish law is the definition applicable in this document. This means, for example, that accidents occurring on the way to or from work are not included in this report, although in Germany they are part of the definition of work-related accident under German law.

The accident rate is calculated using the total number of working hours of the Group for 2010 on the basis of the average annual number of full-time employees times the number of annual working hours. Holidays are not included. The 2010 figures have been adjusted to correct for local differences in number of holidays and vacation days.

<sup>12 &</sup>quot;Klimakompasset"

<sup>13</sup> http://www.pge.com/myhome/environment/calculator/assumptions.shtml

<sup>&</sup>lt;sup>14</sup> "Energinet", uafhængigt offentligt selskab under Energi- og Klimaministeriet

<sup>15</sup> http://www.pge.com/myhome/environment/calculator/assumptions.shtml

<sup>&</sup>lt;sup>16</sup> Carbon Footprint Ltd. UK, britisk baseret Carbon Management konsulentvirksomhed

 $<sup>^{\</sup>rm 17}$  AGFW, "Der Energieeffizienzverband für Wärme, Kälte und KWK e. V."