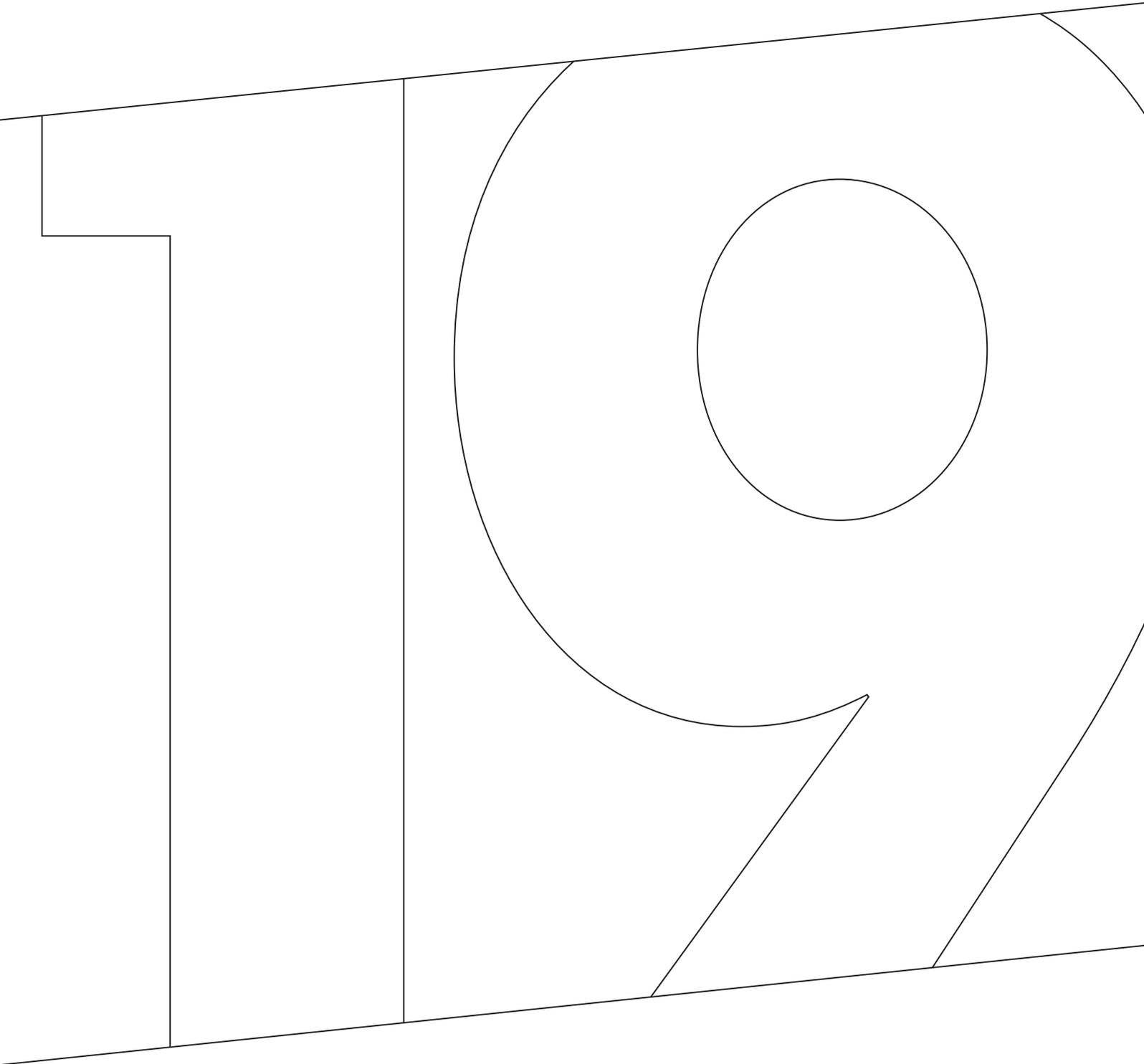


Environmental Report

Glamox AS activity in Molde in the 2019 period





Glamox, the 5 values:

Customers

We value the importance of understanding customer needs and expectations.

Cooperation

We team up with customers and colleagues to find the best solutions.

Commitment

We emphasise the importance of delivering on our promises.

Quality

We focus on delivering the right quality and service.

Ethics

We treat everyone with dignity and respect.



Introduction

Glamox is an industrial group which develops, produces and distributes professional lighting solutions for the global market. Our aim is to be the leading supplier of lighting solutions to the international marine and offshore market, and a leading supplier of lighting solutions to the construction and civil engineering market in Northern Europe. A wide range of lighting products are produced at the factory in Molde for many applications, both on land and at sea. Glamox has a broad spectrum of high-tech quality products intended for many different applications – including demanding environments.

The Glamox Group is a global organisation, with 2,400 employees and sales and production in many European countries, as well as in Asia and North America. The Group owns a range of quality lighting brands, including Glamox, Aqua Signal, Luxo, Norselight, LinksRechts, Küttel, Luxonic and ES System. Glamox meets customers' needs and expectations by delivering quality products and solutions, service and support.

This environmental report covers Glamox AS Molde, and applies to the year 2019. The business is based in Molde, and at the start of 2020 it had 326 employees. Production of interior and industrial lighting takes place here. Previous reporting took place in 2019 and covered the year 2018.

In development and production processes, the focus is on solutions that can help to reduce our environmental impact. This means that the consumption of raw materials, manufacturing processes, and the product when in use and when it becomes a waste product, should cause the least possible damage to the environment. The products must also contribute to a better indoor climate for the customer. Life cycle analyses carried out on our fittings show that energy consumption while the product is in use comprises over 99% of the environmental impact. We therefore consider it an important task to develop energy efficient and environmentally-friendly products and solutions. Through membership of RENAS (Norway's leading recycling company for consumer

electronics), Glamox helps to ensure that products are handled appropriately when they eventually become waste products in Norway. We participate in similar schemes in all European countries in which we are represented.

The business in Molde is certified in accordance with ISO 14001:2015. This means that the company is obliged to meet strict environmental management requirements, and must document this via an environmental management system. Among other things, the company must be able to demonstrate that it works systematically and continuously to reduce or eradicate the negative effects on the external environment.

Code of Conduct

The purpose of the Code of Conduct is to create a transparent, sound corporate culture and to preserve the integrity of the Glamox Group by helping employees to promote standards of good business practice. The Code of Conduct covers our core values as well as our guidelines for corporate social responsibility. All employees (including temporary employees) and board members are required to comply with Glamox's Code of Conduct and other company policies and guidelines.

Glamox and the environment

Our goal is to produce energy-efficient products that are produced through energy-efficient and environmentally friendly processes. The Company supports a cautious approach to environmental challenges, undertakes initiatives to promote greater environmental responsibility and encourages the development and dissemination of environmentally friendly technology.

Personal conduct

As a Glamox employee, you are expected to conduct business in a responsible manner and show respect for business associates, colleagues and others, including other cultures and customs. Glamox does not accept any form of harassment, violence, discrimination or other unacceptable behaviour.

Ethics

Company policies require employees to observe high standards of business and personal ethics in the conduct of their duties and responsibilities. Employees shall behave fairly, honestly and with integrity when dealing with others.

Human rights

The Company supports and respects the protection of international human rights and we strive to ensure that we are not complicit in human rights abuse. Any violation of basic human rights is totally unacceptable.

Health, safety and environment

It is the company's policy to operate its business in a manner designed to protect the health and safety of its employees, its customers, the public and the environment, and in accordance with all applicable health, safety and environment laws and regulations, to ensure protection of the environment and the company's employees and property.

Rules and regulations

It is the company's policy to comply with all applicable laws and governmental rules and regulations in the country in which we are operating. It is the personal responsibility of each employee to adhere to the standards and restrictions imposed by these laws, rules and regulations.

HS&E policy

In line with Glamox's five core values, our business units are committed to working on improving processes and products so that Glamox can help to protect and reduce impacts on the environment.

Continuous improvement and a high level of expertise are key in order for us to develop, produce and sell environmentally friendly lighting solutions with the appropriate quality, long useful life and low energy consumption.

Through our undertaking to comply with local, global and self-imposed requirements, we shall help to reduce impact on the environment. This means setting objectives to:

- reduce waste
- increase recycling and
- where possible, use environmentally efficient transport solutions
- reduce energy consumption
- prevent emissions to the environment

What we mean by environment

By "environment", we mean hazards associated with the pollution of the external environment and measures to prevent and limit these, in order to preserve the environment and prevent damage to health. In addition, measures to limit damage if pollution has already occurred, will be implemented. Environment also covers the business's consumption of energy, and all activities related to this.

Overall objective

To comply with laws and regulations from public authorities with regard to both the internal and external environments, and ensure that this can be documented.

- To create positive attitudes among all employees with regard to work on health, safety and the environment at Glamox.
- Where possible, the company must use raw materials and components that are environmentally friendly, and where recyclable or recycled solutions can be used from a quality perspective, this must be prioritised.
- A sense of responsibility for the environment should be instilled in employees at all levels.
- The environmental impact of new products and processes must be assessed in advance.
- Where possible, the processes must use recycling systems, be environmentally friendly, and all laws and regulations regarding emissions must be followed.
- The environmental impact of new products and processes must be assessed in advance.
- Products must be environmentally friendly in terms of application and function, and also must not damage the environment when no longer in use.
- The company must work continuously to improve and prevent pollution, so that the external environment is affected to the least possible extent.

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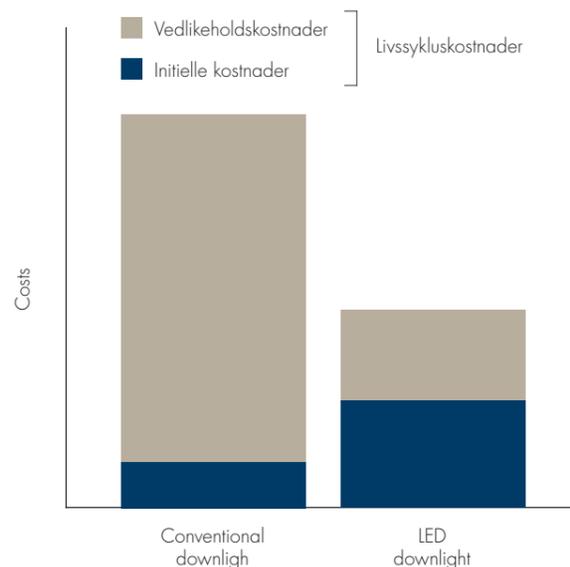
- The effect of ongoing activities in the area must be assessed and monitored, and measures put in place if necessary.
- The environmental impacts of the company's business must be transparent, including to the general public.
- The management system must be certified in accordance with EN ISO 14001.
- Organise the work environment in such a way that each individual employee can perform at his or her best, and to ensure that nobody is injured and nobody's health is impaired as a result of doing his or her job.
- Conduct a continuous and systematic evaluation of the business's energy consumption.
- Identify and update the flow of energy within the business.
- Plan to implement energy-saving measures and evaluate this regularly.
- Activities to improve energy efficiency must be updated continuously.

Environment-related projects

Environmental issues relating to energy consumption are probably the greatest challenge we will face over the next 20 years.

The most environmentally appropriate energy will always be the energy we don't use, and it is here that modern technology can help. Lighting accounts for approximately 20% of the energy consumption in a commercial building today.

By switching off the light automatically when nobody is present, and regulating the artificial lighting when daylight adds to the light in the room, we can help save the global environment, the environment in buildings as well as major operating costs. To simplify installation and planning and to reduce possible sources of error for our customers and users, Glamox has chosen to integrate various sensor options into the fittings. Also, an



important factor is that lower usage times result in longer life cycles for components and light sources. An optimal lighting control system can provide up to 70% in energy savings.

Glamox is now developing a range of fittings with LED technology, an energy-efficient option which also produces a longer life cycle and less maintenance.

Contributing to environmentally friendly solutions is an important factor in our development of new fittings and lighting solutions.

Focusing on LED technology

A light-emitting diode (LED) is an electronic component that generates light in a semiconducting material. By using different materials, a diode can produce light at different wavelengths.

White light is created by either using a blue diode or a so-called "chip" and adding yellow phosphorus to the top, or mixing light from a red, green and blue diode (RGB). The use of phosphor conversion is the most widely used method in the lighting industry due to the high level of effect and flexible production method. Phosphor can be added directly to each chip or as an external phosphor sheet on top of a light mixing chamber. Phosphor conversion gives the LED a specific colour spectrum, or spectral distribution, depending on the phosphor layer.

LED is not a new invention, and most of us are used to seeing red or green LED signals on our Hi-Fi equipment or television. These are so-called low-power diodes with low power consumption. In recent years, high-power diodes, i.e. diodes operating at approx. 1W, have reached a level of cost and performance that make them attractive to the lighting industry.

Market studies show that in several European countries in 2019, over 80% of all light sources sold were LED based. Since LEDs are more expensive than conventional light sources, the value of sales within LED will be even higher. In 2019, LEDs comprised 89% of luminaires sold by the company in Molde.

One of the advantages of LED is that all light is emitted in one direction. This results in fewer reflections inside the fitting since we normally want the light to be directed downwards only.

An advantage of LED technology is its long life. Because the diode has no moving parts or filaments that can blow, we can expect a long life. In a lighting system, a fluorescent tube will be replaced 2-5 times before 50,000 operating hours are achieved. The fluorescent tubes will lose 10 - 25% of their original light output before being replaced. LED does not need to be replaced, but will lose 30% of the light during its lifetime. At Glamox, we aim to produce LED luminaires with single LEDs, LED modules and LED drivers of the best possible quality. Miljøforbedringer siden forrige miljørapportering

Environmental improvements since the last environmental report

Sorting level

The sorting level for 2019 was 71.2 % (metal is not included). This is a considerable reduction from 2018 (80 %), and the company's objective of 80 % was not achieved.

The amount of residual waste rose compared with the previous year. Our objective of reducing the amount of residual waste by 5 %, measured against turnover, was thus not achieved in 2019. Reduction in the amount of residual waste measured against turnover was an increase of 32%.

In 2019 consumption of electricity increased by 2.5 % from the previous year. Measured in relation to turnover, consumption thus increased by 4%. The objective of at least 10% reduction, measured against turnover, was therefore not achieved.

Measures that have contributed to a reduction in electricity consumption are:

- Renovation of light fittings in several parts of the building.
- Renovation of parts of the roof in manufacturing and warehouse.
- Monitoring of consumption of larger consumption sources via SD system.
- Installed lighting control in several parts of the building also in production.

An action plan has been established within energy management. This plan contains all the measures that the company is working on in order to reduce its total energy consumption. It contains both organisational and physical measures.

Fuel oil

In connection with the government imposed ban on the use of fossil oil or paraffin for heating buildings, we replaced this with a BFO 2G renewable biofuel oil (EN15940). BFO 2G is a second-generation bio fuel oil - a renewable product. Glamox has chosen this product because it replaces fossil biofuel oil and we want to prioritise the environment and sustainable operation of oil burners. The fact that this product is renewable means that it is always possible to generate new products of this type in a sustainable cycle. Raw materials are certified for traceability and reduction of greenhouse gases. The product is CO2-neutral. Approximately 2.6 kg of CO2 is produced for each litre of bio fuel oil burned. This CO2 is part of the atmosphere's short CO2 circuit.

Personal injuries and sickness absence since the previous report

H-value for 2019 was 0.

Accumulated sickness absence for 2019 was 5.8 %.

Environmental effects

Air

Furnaces (content per litre of gas emissions):	CO ₂	12,5 – 13 %
	O ₂	3,3 – 4 %
Efficiency:		91,4 – 93 %
Consumption of fuel oil in 2019:	20 000 liters	
	(10 fossil and 10 bio)	
Emissions of kg CO₂ into the air:		
2017	50,597	
2018	58 586	
2019	52 630	

Powder paint is used as a protective layer on standard luminaires. Both painting plants are fitted with a filter and recycling system to protect against emissions while also ensuring optimal usage of the paint.

Otherwise, pre-painted materials are increasingly used in the manufacturing of new products.

Waste (volume in tonnes)

Materials	Volume in 2018	Volume in 2017	Volume in 2016	Goes to
Steel (all types)	279.76	234.67	349.84	Material recycling
Aluminium	9.01	12.66	19.9	Material recycling
Paper/cardboard	51.58	55.06	63.04	Material recycling
Plastic film/	28,86	18,32	25,88	Material recycling
plastic cans	21.5	28.86	18.32	Material recycling
Timber	45.02	73.14	82.58	Energy recycling
Residual waste	71.42	50.34	108.46	Energy recycling
Hazardous waste	6.37	4.56	9.57	Energy recycling
approved facility	1,92	4,24	3,44	Compost
EE waste	38.06	26.80	39.16	Material recycling/ approved facility
Bio	2.71	1.92	4.24	Compost

Distribution of waste

* As a percentage of total volume of waste

Goes to	2018	2017	2016
Energy recycling	23.9%	26,2 %	28.9%
Material recycling	76.1%	73.8%	71.1%

The company has a high level of waste sorting and sorts a total of 14 different fractions.

	2019	2018	2017
Sorting level for waste	71.2%	80 %	66.7%

Polluted water

No emissions from the activities.

Ground

No emissions into the ground from the activities.

Noise

Large vehicles transporting goods to and from the business at Molde are the biggest source of noise in regard to the external environment. The need for surveys has been assessed in conjunction with experts in this area.

The conclusion was that there is no need to carry out surveys. The experts state that any noise level measured would be well below the level of background noise.

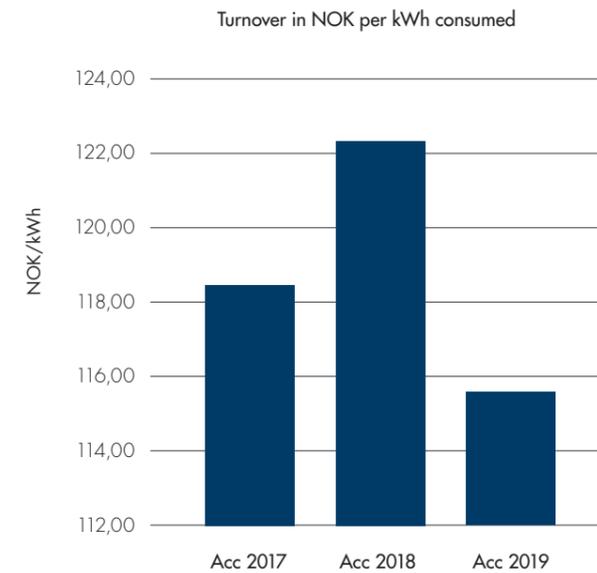
Consumption

Energy

Energy	Volume in 2019	Volume in 2018	Volume in 2017
Electricity	4.55 GWh	4.44 GWh	4.45 GWh
Fuel oil	20,000 l	22,000 l	19,000 l

Energy consumption per light fitting produced

	2019	2018	2017
kWh/product	9.23	8.05	7.51



Consumption of significant raw materials and aids

Materials (figures in tonnes)	Volume in 2019	Volume in 2018	Volume in 2017
Steel	1,827.1	1,764.7	1,903
Aluminium	67.7	89.6	108.3

Average consumption of metal per product

Figures in kilograms	2019	2018	2017
Average volume of metal per product	3.26	2.75	3.5
Average volume of waste metal per product	0.59	0.45	0.6
Total average volume of metal per product	3.85	3.2	4.1

Health and the work environment

Sickness absence

The business at Molde has an IA agreement and works continuously to prevent absence due to sickness and modify the workplace as much as possible for individuals who need this. Prevention and follow-up. Glamox has an agreement with BRA Astero, and they are involved in the company's HS&E work.

There were no personal injuries in 2019. The company can demonstrate that it has a system for health, safety and the environment, and this year it has carried out surveys and risk analyses to prevent injury to people, the environment and materials.

Sickness absence

Year	Sickness absence percentage
2017	6.9
2018	6.9
2019	5.8

Injury circumstances

Year	Number of accidents w/ absence	H-value*
2017	2	3.9
2018	3	6.1
2019	0	0

* Number of personal injuries resulting in absence per million hours worked

Objectives for 2020

The UN's sustainability goal no. 12 Sustainable consumption and production

1. The volume of residual waste must be reduced by a minimum of 5% in relation to the volume delivered in 2019.
2. The sorting level for all waste, other than metal, shall be 75 % or higher.
3. The amount of waste delivered, measured against the number of products produced in GPM, must be reduced by a minimum of 10% in relation to the level in 2019.



In order to achieve this the following measures will be implemented:

Measures:

- Issue an information brochure on waste sorting at Glamox to all employees.
- Carry out random sampling of waste during internal audits and safety inspections.
- Introduce waste sorting as a topic at GUTS board meetings.
- Carry out an audit of the refuse collector.

Electricity consumption

1. Reduce electricity consumption, measured against turnover in GPM, by at least 5% compared with the level in 2019 (W/NOK).

Measures:

- Issue an information brochure on energy. Raise awareness.
- Continue developing the SD system to better control and manage energy consumption.
- Renovate lighting system in parts of the buildings. Transition to LED luminaires with daylight and motion sensors features.

Health

1. Average sickness absence for salaried employees should be 2.0% or lower.
2. Average sickness absence for hourly paid employees should be 6.0% or lower.

Measures:

- Follow up employees closely. Early dialogue with the employees. Involve the company health service (BHT) in dialogue meetings.
- Make active use of company health service – in support and follow-up discussions.
- Cooperate with NAV and company health service via IA meetings.
- Offer flu vaccine.

Safety

1. The H value should be 0.
2. The TRI value should be 0.

Measures:

- Risk assessment of work processes and machines.
- Safety inspection rounds for teams and departments.
- Update existing risk assessments for machines and work operations.
- Refresher course for lorry drivers.
- Risk assessment of installation when introducing a new product.

Molde, Norway, 31.03.2020

