

Reporting practice and HSE performance key figures H. Lundbeck A/S - 2018

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1. Introduction

Each year Lundbeck complete an annual status of health, safety and environment (HSE) with the purpose of illustrating and evaluating our activities.

This is based on Lundbecks health, safety and environment system, certificated to the international ISO 14001 and OHSAS 18001 standards. The system ensures coordination and prioritisation of Lundbeck's HSE efforts so we constantly improve all aspects relating to health, safety and environment.

2. Objective and scope

The objective is to report our annual HSE data complete and correct and with a high degree of credibility. This includes a systematic documentation and verification of the HSE data.

HSE reporting covers the overall HSE performance of all significant HSE data relevant to Lundbeck. The criteria are based on significant HSE aspects in Lundbeck HS&E system, GRI indicators, experience and knowledge from other companies in the pharma industry etc.

The target group for the reporting are Lundbeck external stakeholders as well as existing and potential employees.

Following key data is communicated in our COP Report and/or www.lundbeck.com:

- Chemical and Pharmaceutical production
- Consumption of organic solvents
- Water and waste water
- Consumption of electricity and heat
- Emissions of CO₂
- Waste
- Environmental incidents and near-misses
- Work related diseases, work related accidents and near-misses
- Frequency of work related accidents with absence

The scope for reporting Lundbeck HSE data is all sites of development, research and chemical/pharmaceutical production owned/controlled by Lundbeck. Administration is not included unless being part of a site of development, research or chemical/pharmaceutical production.

Sales organizations are not included and development, research and chemical/pharmaceutical production sites of less than 50 employees are not included.

This scope covers 40-45% of all Lundbeck Group employees, but the reported scope is assumed to cover a significantly larger proportion of the Group's total values on the reported HSE KPIs.

In 2018 HSE data originated from 4 different sites all covered by Lundbeck HS&E system:

1. Lundbeck headquarter, Valby, Denmark
2. Chemical production, Lumsås, Denmark
3. Chemical production, Padova, Italy
4. Pharmaceutical unit Elaiapharm, Nice, France

All reported data are covering a full year period (1st of January to 31st of December).

However, December data on energy and water may in some cases be estimated due to difficulties obtaining the data before deadline. This applies to the following data:

- Italy: Electricity

The estimates are based on a corporate instruction.

If sites are closed down or new sites are acquired at any time within the reporting period, these data are addressed in our reporting as well.

3. Corporate level (Corp. HSE)

Corporate HSE manage the corporate data gathering process and assist and support the individual sites with the data compilation in the electronic data collection system -"HSE Data Collect".

The verification of data is done by conducting internal audit on the local data compiling practice and ensures external validation of data. Data is consolidated for www.lundbeck.com in co-operation with Corporate Reporting. Additional HSE data is found in our annual Corporate Responsibility report also located on our homepage.

4. Local level (HSE departments)

On a local level the HSE departments allocate resources, update local instructions and identify key persons considered relevant in providing local annual HSE data in the electronic data collection system -"HSE Data Collect".

These key persons report and submit the data by ensuring that data are compiled, crosschecked and signed off. All compiled data are documented in such a way, that external validation of the data is possible. Essential documentation is ensured safe keeping for a minimum of 5 years.

5. Data compilation, documentation and quality assurance

The HSE data to be compiled is listed in section 6 "*Definitions for HSE performance key figures*". Some data are measured, other data are calculated or estimated, depending on the type of data and the method available, but all areas of consumption and measurements are identified to ensure completeness.

To validate data documentation, the data source with the highest reliability and accessibility is always chosen. It is also a requirement that data must be traceable back to the primary source. Deviations in data of more than 5% compared to previous year must always be explained.

The quality assurance process makes sure that all attached documentation is crosschecked and signed off by management. The process also requires an external validation to approve all consolidated data entering the Lundbeck Annual Report and presented at www.lundbeck.com.

This is done on corporate level in co-operation with Corp. HSE with a review statement by an independent auditor.

6. Definitions for HSE performance key figures

Key figure	Unit	Source	Definitions
Finished goods production (total)	units	C	Pharmaceutical production is established in production units (e.g. one package of finished goods). Data are reported in SAP.
Chemical production (total)	tonnes	C	Chemical production of produced active substance. Data are reported in SAP.
Raw materials (total)	tonnes	C	Consumption is divided in two groups: "Organic solvents" and "Other materials". Data are reported in SAP and from log books. Note: Data on "Organic solvents" and "Other materials" has been modified 12th March 2015, due to an error discovered after final data was published.
Organic solvents	tonnes	C	Organic solvents consist of chemical compounds used in research and production.
API	tonnes	C	Active Pharmaceutical Ingredients. Data are reported in SAP.
Water consumption (total)	m ³	C,E	Water consumption is the quantity of water supplied to Lundbeck. Data source: Online systems, reports from supplier and data from meters.
Potable	m ³	C,E	
Unfiltered	m ³	C,E	Padova only
Energy consumption (total)	MWh	C,E	Energy is divided in to: electricity, gasoil or bio oil, gas (natural gas, methane or city gas) and district heating. Data source: Online systems, reports from supplier and data from meters. Data from December can in some cases be estimated if the supplier cannot provide the number prior to annual reporting.
Gas (natural gas, methane or city gas)	MWh	C,E	
Gasoil, biooil	MWh	C	
District heating	MWh	C	
Electricity	MWh	C,E	
Air emission (total)	tonnes	C	Solvents, CO ₂
Organic solvents	tonnes	C	Solvent emissions are established from online systems/meters in the discharge or from consumption and fixed evaporation percentages.
CO ₂	tonnes	C	CO ₂ emission solely includes scope 1 (own produced energy) and 2 (purchased energy). Energy consumption is converted to CO ₂ emission by emission factors based on key figures from suppliers.
Waste (total)	tonnes	C	Waste is divided into "chemical waste", "Non-chemical – other types of waste" and "Construction waste". Data source: Online systems, reports from supplier and weight data from transporting companies.
Chemical (total)	tonnes	C	"Chemical" are sub divided depending on type of treatment in reuse, incineration and landfill.
• Recycling	tonnes	C	
• Incineration	tonnes	C	
• Landfill	tonnes	C	
Non-chemical – Other waste (total)	tonnes	C	"Non-chemical" are sub divided depending on type of treatment in reuse, incineration and landfill.
• Recycling	tonnes	C	
• Incineration	tonnes	C	
• Landfill	tonnes	C	
Waste water	m ³	C	At site Valby waste water emission equals the total consumption of water. In Lumsås and Nice the figure differs due to water used in production processes and water in liquid chemical waste. In Padova waste water includes treated and discharged ground water. Data source: Online systems, reports from supplier and data from meters.
Environmental incident	no.	C	Accidental release, an unintentional release where the released substance is out of control and has had or may have an impact on the external environment. Incidents with an impact on the environment are also reported. Impact: if severity is rated "High" or "Catastrophic". Reported by the employees and stored in a common database.
Environmental near miss	no.	C	Contained spill, which did not have an adverse environmental impact. Could have escalated to an environmental incident had the circumstances been a little different (No or little spill). Reported by the employees and stored in a common database.
Work related	no.	C	An undesired event or exposure that gives rise to personal injury and results in

accident with absence			more absence than the day the event took place. Number of employees is an estimate of corporate full-time, part-time and temporary employees. Employee does not include contractors from various maintenance firms who are given direction by their own supervisor who in turn is given direction by a Lundbeck (or subsidiary) employee. Total number of man hours is calculated using an estimate of 225 working days a year, 7,4 hours per day. Reported by the employees and stored in a common database.
Work related near miss	no.	C	A sudden, unexpected incident or situation where no personal injury occurs, but a notable event so that injury could have resulted had circumstances been a little different. Reported by the employees and stored in a common database.
Work related accident without absence	no.	C	An undesired event or exposure that gives rise to personal injury. Reported by the employees and stored in a common database.
Work related diseases	no.	C	A work-related disease is a disease that is caused by prolonged exposure at work and recognized by the competent authority. Chronic work-related diseases should only be recorded once in Lundbeck data collecting process.

C= Calculated

E= Estimated:

Data from December can in some cases be estimated if the supplier cannot provide the number prior to annual reporting.