

## LUNDBECK

UN GLOBAL COMPACT 2016 COMMUNICATION ON PROGRESS REPORT



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#### REPORT SCOPE AND METHODOLOGY

Our corporate values and the ten UN Global Compact principles set out the framework for our business conduct and our sustainability efforts. We have assessed that these efforts directly support seven of the UN Sustainable Development Goals and several of the underlying targets. This report represents Lundbeck's eighth annual Communication on Progress to the UN Global Compact as well as our non-financial report on CSR according to the Danish Financial Statements Act.

The report describes Lundbeck's global activities and progress in 2016, and contains descriptions of planned activities and targets for 2017. The report has been developed without direct engagement of external stakeholders.

The health, safety and environmental (HSE) data cover our corporate headquarters in Denmark and larger<sup>1</sup> affiliates with research, development and manufacturing activities. These data have been reviewed by our auditor, Deloitte, in accordance with ISAE 3000. The remaining affiliates are not included in HSE data.

<sup>&</sup>lt;sup>1</sup> Lundbeck affiliates with more than 50 employees.

## **EXECUTIVE STATEMENT**

Lundbeck continues to support the UN Global Compact and to promote initiatives that demonstrate our commitment.

I am pleased to express our continued support to the UN Global Compact. We recognise our corporate responsibility to respect human and labour rights, to commit to environmental protection and to work against corrupt behaviour.

During the past year we have made significant progress and fulfilled more than two thirds our sustainability targets. I believe our achievements reflect that we continue to operate with a high level of ambition within sustainability.

Our updated sustainability framework includes seven of the 17 Sustainable Development Goals that the UN have agreed are of critical importance to pursue until 2030. I believe that it is within these seven areas, we can make the most significant contribution as a global pharmaceutical company.

'We are responsible and overcome challenges by demonstrating respect, open-mindedness and integrity'

We are committed to enhancing transparency of our actions. I hope this report will inspire our stakeholders to a dialogue about our activities and that these discussions will inspire us to become a more sustainable company.

Kåre Schultz President & CEO

# OUR BUSINESS MODEL AND SUSTAINABILITY FRAMEWORK

Lundbeck strives for global leadership in psychiatry and neurology by improving the lives of patients. In this section we outline our business model along with our strategic framework, achievements and targets on compliance and sustainability.

Lundbeck is a global pharmaceutical company highly committed to improving the quality of life of people living with psychiatric and neurological disorders. For this purpose, we are engaged in the research & development (R&D), production, marketing and sale of pharmaceuticals across the world. The company's products and development projects are primarily targeted at depression, schizophrenia, Parkinson's disease and Alzheimer's disease.

According to the World Health Organization, WHO, more than 700 million people live with psychiatric and neurological disorders globally. These are serious and life-threatening diseases that affect the quality of life of the patients as well as of their relatives. As these diseases also involve major socio-economic costs, it is imperative for the general society that new and innovative pharmaceuticals are developed. Over the past 70 years, new pharmaceuticals have revolutionised the treatment options, but there remains a large unmet need for new and innovative therapeutics.

Focus on R&D is the most important pillar in Lundbeck's ambition to improve treatment for people living with psychiatric and neurological disorders. We are specialists in our area and have more than 900 employees working within R&D. We cooperate closely with strategic partners all over the world, ensuring the best possible foundation for innovation and the development of new treatment solutions.

Lundbeck markets a number of different pharmaceuticals for the treatment of psychiatric and neurological disorders. You can read more about our business activities in Lundbeck's Annual Report 2016 and on <a href="https://www.lundbeck.com">www.lundbeck.com</a>.

Our sustainability framework aims to ensure that our business activities are conducted in a way that mitigates the related significant risks and that supports the UN Global Compact Principles and the relevant UN Sustainable Development Goals.

#### **LUNDBECK'S SUSTAINABILITY UN GLOBAL COMPACT UN SUSTAINABILITY FRAMEWORK PRINCIPLES DEVELOPMENT GOALS** Ethics: Ethical considerations we make Human Rights principles while delivering safe and efficacious (1 and 2) medicine to patients Society: Our contribution to local economies Labour Rights and Anti-Corruption and actions to prevent corruption and bribery principles (3, 4, 5, 6 and 10) in any form Environmental principles **Environment**: Preventive actions we take to minimise the environmental impact of our (7, 8 and 9) business activities Employees: Providing safe and healthy Labour Rights principles working conditions, respecting labour rights (3, 4, 5 and 6) and promoting employee development

Risks within the four focus areas Ethics, Society, Employees and Environment are continuously assessed and managed as part of the planning and execution of our business activities. As a research and development based global pharmaceutical company many of these risks are governed by detailed legal requirements or industry self-regulation. Consequently, we have established a Compliance Structure (illustration) to ensure that relevant requirements and controls are clearly described (documents), are properly understood (training) and are being followed and that areas of improvement are identified (monitoring).



Based on this we annually evaluate our sustainability performance and establish targets for coming year to enhance our risk mitigation, business processes and performance. The result of the evaluation and the new targets are shown below.

	TARGET 2016	STATUS	TARGET 2017	
Ethics	Publicly disclose payments to healthcare professionals in accordance with industry codes and local regulations	Achieved	Promote responsible and transparent interactions with Healthcare Professionals	
	Continuously promote Access to Health initiatives	Achieved	Identify, pursue and publicly report on our Access to Health initiatives	
	Monitor donations and publicly disclose information about the provided support	Achieved		
Society	Issue and implement an updated Code of Conduct with training for all	Achieved	Provide Code of Conduct training for all Lundbeck employees globally	
	Continue the enhancement of our audit and monitoring processes	Achieved	Continue the enhancement of our audit and monitoring processes	
	Finalise global implementation of the supplier evaluation process	Achieved	Ensure relevant suppliers complete business ethics training	
Employees	Lost time accident frequency ≤ 4	Not achieved: 7.3 (comment on page 9)	Lost time accident frequency ≤ 4	
	Accident absence rate ≤ 0.14 hours of absence per 1,000 working hours	Not achieved: 1.1 (comment on page 9)		
	Work related diseases ≤ 2	Achieved	Work related diseases ≤ 2	
Environment	Reduce energy consumption by 4% in 2016 compared to 2015	Not achieved: 1.8% (comment on page 11)	Reduce energy consumption by 3% in 2017 compared to 2016	
	Reduce CO <sub>2</sub> emissions by 4% in 2016 compared to 2015	Achieved	Reduce CO <sub>2</sub> emissions by 5% in 2017 compared to 2016	
	Recycling of 50% of selected solvents	Not achieved: 37% (comment on page 12)	Recycling of 40% of selected solvents	
	Zero environmental incidents with an impact on the environment	Achieved	Zero environmental incidents with an impact on the environment	

An overview of selected key indicators for Lundbeck's sustainability performance is provided on page 14.

## **ETHICS**

Lundbeck takes action as warranted to provide safe and efficacious medicine and we recognise our broader responsibility to support patient's needs. We apply high ethical standards to safeguard the integrity of the stakeholders we interact with.

Lundbeck agrees that businesses have a responsibility to respect Human Rights and to act ethically. We believe that to a global pharmaceutical company respecting Human Rights and promoting Access to Health are inextricably linked. People living with psychiatric and neurological disorders experience significant barriers to health. The lack of safe and effective medical treatment is one barrier that Lundbeck is trying to address through the discovery, development, manufacturing and marketing of medical products.

#### Transparency helps safeguard our ethical standards

We take responsibility for keeping the patients who need our medicine safe. This involves a wide range of actions in the research and development of new treatments, in the manufacturing and distribution of finished products and when educating Healthcare Professionals (HCPs) and Healthcare Organisations (HCOs) on their use of our products. These actions are driven by regulatory requirements established by authorities and ethical considerations described in industry codes and Lundbeck's own policies and procedures. Transparency is a pivotal element in safeguarding these requirements and ethical standards.

Lundbeck encourages publication of results from research and clinical studies irrespective of the results and acknowledges a special obligation to publish data related to patient safety. We are committed to responsible sharing of clinical trial data in consistency with the privacy of patients, the regulatory requirements and the intellectual property of the sponsor.

We are committed to promoting transparency by disclosing payments and other transfers of value we make to HCPs and HCOs according to our global procedures in respect of legal requirements and regulation from the industry associations we have joined. In 2016, we made the first disclosure of these payments in accordance with the EFPIA Disclosure Code. The data is available on <a href="www.lundbeck.com/global/sustainability/ethics">www.lundbeck.com/global/sustainability/ethics</a> and it includes the total annual amounts of value transferred, by type of activity e.g. a grant to an HCO, a consultancy fee for speaking, payment for travel or registration fees to attend a medical education congress.

Lundbeck believes that the transparency initiatives that are being enacted globally will ultimately enhance the general acceptance of these professional relationships. Lundbeck is disclosing these transfers of value where this is required, including in the US, EU and Japan. We will continuously promote responsible and transparent interactions with HCPs and HCOs.

#### Providing support to patient advocacy groups

Our involvement with patients and advocacy groups underlines the meaningful impact we hope to have for people living with psychiatric and neurological disorders. Their perspectives inspire everything we do. By engaging with patients and their families we gain a better understanding of the needs they have. It is our responsibility to apply this understanding toward the development of new therapies and support programmes.

In June 2016, Lundbeck hosted the third annual global patient summit under the theme "One voice – together we will make a difference". The meeting convened patient advocacy groups concerned with mental health and neurological disorders from around the world. The meeting facilitated knowledge exchange, sharing of best practices, provided an opportunity to hear from experts and form networks. Interactions with patient groups are an integral part of Lundbeck's focus and strategy. Only by addressing patients' needs can we achieve our business objectives and only by achieving our business objectives can we address patients' needs. In the coming years, we will continue our efforts to identify, pursue and publicly report on our interactions with patient groups and other Access to Health initiatives.

### SOCIETY

Lundbeck's ambition is to contribute to society by improving the quality of life of people living with psychiatric and neurological disorders. We recognise our economic impact on society and take action to prevent corruption in any form.

Lundbeck's most significant contribution to society is developing and delivering innovative treatments of psychiatric and neurological disorders. We would like to maintain a business model that gives patients access to efficacious medicine and also allows reinvestments in innovation to meet unmet medical needs. We recognise that healthcare systems are facing affordability challenges of innovative medicine. We address some of the complex issues related to pricing in our global pricing position that is available on <a href="https://www.lundbeck.com/global/sustainability/society.">www.lundbeck.com/global/sustainability/society.</a>

In addition to providing medicine, we aim to promote disease awareness and help addressing the societal burden of psychiatric and neurological disorders. As part of this work we occasionally provide donations and grants to eligible recipients for appropriate purposes. In 2016, we established a global due diligence process to ensure that any request for a donation or a grant is carefully assessed. This aims to ensure that such contributions from Lundbeck support the intended purpose and eliminate the risk of supporting organisations that are not aligned with Lundbeck's Code of Conduct. We have received the first requests and have engaged into dialogue about specific collaborations that will be included in our public reporting for 2017, if we reach an agreement.

#### Giving our employees best possible conditions to act responsibly

Our Code of Conduct represents Lundbeck's commitments and the expectations to our employees for the areas that are critical to the pharmaceutical industry, including key principles that address business ethics. The Code's anti-corruption principles are supported by corporate and local procedures for our interactions with suppliers and key stakeholders for instance public officials. Lundbeck's procedures for authorisation and signing also address our anti-corruption commitment and help ensure that Lundbeck enters into agreements and makes purchases in a transparent and responsible manner.

Having an open dialogue is at the foundation of our approach to prevent corruption. This dialogue is supported by annual training for all employees that places our Code of Conduct and related procedures in a business context. During 2016, we implemented an update of our Code of Conduct through a comprehensive implementation process that included mandatory ethics training for all employees, additional training for our approx. 800 people managers globally and specific actions for the 78 senior management representatives who were responsible for the local implementation. The online training programme for all employees practiced the use a four-step process for making ethical considerations: Think – Explore – Discuss – Decide.

The senior management representatives conducted local face to face discussions with their managers and employees about the ethical considerations that are relevant in their particular business areas. The same group of managers were also asked to provide input to a comprehensive survey about the effectiveness of Lundbeck's Compliance Structure and their proposals to further enhance global and local controls. The survey provided valuable input and part of it is being used in the design of the upcoming annual Code of Conduct training that all Lundbeck employees globally will be asked to complete in 2017.

#### Comprehensive monitoring programme

Every year we update our compliance risk map based on business activities, audit findings, trends in internal reporting and external sources that capture learnings from peers and leading experts. The current risk map is used to keep our corporate procedures up to date, prioritise new preventive measures and plan relevant monitoring activities. Our monitoring is a mix of quarterly reporting from our global business units, audits and investigation of reported concerns in our Compliance Hotline.

Lundbeck's Compliance Hotline is available for reporting legal or other serious concerns, which cannot otherwise be properly addressed. Reports are handled strictly in accordance with our global investigation procedures, including relevant data protection requirements and Lundbeck's non-retaliation policy, which does not accept any retaliation or discrimination against

anyone who communicates a concern in good faith. During 2016, we received 13 reports in the Compliance Hotline. Out of the 12 completed investigations five were substantiated and appropriate corrective and preventive actions were initiated.

We conducted 150 internal audits that covered research, development, manufacturing, health, safety and environment, marketing, sales, IT and finance during 2016. Our dedicated business ethics auditors visited nine Lundbeck business units and two key commercial partners. In the coming year, we will continue the enhancement of our audit and monitoring processes.

#### Ensuring well-regulated collaboration with suppliers and partners

Globally, we engage a wide range of suppliers and partners. These collaborations serve specific business purposes and add value to the local economies. However, we are also conscious that these collaborations potentially may adversely impact society. As part of our Code of Conduct and UN Global Compact commitment, we ask our suppliers and partners to prevent corruption, provide safe and healthy working conditions, minimise their impact on the environment and respect human & labour rights in the mutually binding agreements we enter. Some suppliers are selected for a more detailed evaluation based on requested product or service and the supplier's location. This evaluation process involves a review of prospective supplier's commercial capabilities, their quality standards, the adequacy of their business ethics controls and their overall performance.

We finalised the global implementation of Lundbeck's supplier evaluation process in 2016, which now covers all new agreements made by Lundbeck entities globally. These controls have been in place since 2005 for suppliers to our manufacturing activities and additional regulatory quality assurance covering research, development and manufacturing have been in place for decades. We will include the relevant existing agreements in the supplier evaluation process in 2017.

During 2016, our skilled employees working with engaging suppliers asked our compliance experts at Lundbeck's headquarters to conduct a thorough assessment of 72 potential new suppliers. Five of these assessments resulted in significant enhancements of the suppliers' ethical standards and controls as a condition for the collaboration with Lundbeck. As part of the ongoing global monitoring of our suppliers in 2016, we terminated and initiated termination of agreements with 16 suppliers that did not meet our ethical standards. In addition, we conducted 167 audits at key suppliers and partners during 2016.

The most recently added control measure is an online business ethics training programme that is intended for strategic suppliers operating in high risk countries. The programme was successfully tested during 2016 and we have decided to make it our global standard for a specific group of suppliers from 2017 onwards.

## **EMPLOYEES**

Lundbeck takes action to provide a safe and healthy work environment for our employees and to promote diversity and development opportunities for our employees.

Lundbeck wants to offer our approx. 5,100 employees globally employment conditions that respect the individual's fundamental labour rights, offer relevant developing opportunities and a working environment that safeguards their health and safety. Our supplier evaluation and due diligence processes aim to ensure the same rights and principles are upheld in our value chain.

The internationally recognised labour standards as set forward by the International Labour Organisation (ILO) and national requirements form the basis for our corporate policies for recruitment and diversity. We want to support a culture of mutual respect and believe that diversity among our employees contributes to enrichment of ideas that drives innovation and progress. Workplace assessments direct our efforts to provide a safe and healthy workplace. We offer regular training to our managers and employees to minimise the number of work-related accident and increase awareness of mental health at work.

We have integrated our policy and procedures within Health, Safety and Environment (HSE) because we believe this joint approach holds mutual benefits and supports a culture based on continuous improvement, cooperation and business integration.

#### Diversity in management maintained

According to our target regarding diversity at Board of Directors level, at least one of the members elected by the shareholders should be of the underrepresented gender. In terms of the 2016 board composition, we had two female board members out of five members elected by the shareholders and one female board member out of three members elected by Lundbeck's employees. At the other managerial levels we aim to ensure that the proportion of the underrepresented gender is at least 40% globally. This target was met in 2016 and in recent years excluding 2014 where the proportion was 39%.

Our actions to meet the target are unchanged. We offer equal opportunities for men and women across organization in accordance with our employee policies and guidelines that provide equal opportunities and benefits for both genders.

#### Systematic and coordinated approach to HSE

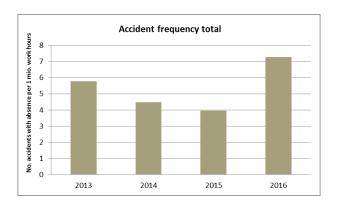
Since 2008, Lundbeck has maintained a high level of involvement in decisions regarding HSE across all organisational levels via our ISO 14001 and OHSAS 18001 certified HSE management system. The system ensures due diligence via a coordinated and prioritised HSE effort and enables managers and employees to think and act safe and green. The target setting procedure is a pivotal part of the system as it integrates significant HSE aspects and impacts, allows discussions and coordination and thereby establishes relevant corporate and local targets. In the spring of 2016, the HSE system was re-certified at all our sites with research and manufacturing activities, which demonstrate that we effectively manage our significant HSE impacts.

The updated ISO 14001 standard has been published and update of OHSAS 18001 is ongoing. Consequently, we have initiated a revision of the procedures in our HSE system and will be ready for certification according to the current standards in 2018.

#### Increased level of work-related accidents is an unfortunate opportunity to learn

Lundbeck strives to minimise the number of work-related accidents. Therefore all accidents are registered and a careful root cause analysis is performed to identify preventive actions. Despite these systematic efforts to prevent accidents, we experienced an increase in the number of accidents and the related days of absence during 2016, which meant that we did not reach the established targets. Our accident frequency ended on 7.3 accidents per 1,000,000 working hours and our absence rate at 1.05 hours of absence per 1,000 working hours, while the targets were 4 and 0.14 respectively.

We are using this undesired development as an opportunity to learn more about the causes and how to prevent them. During 2016, specialists in our Corporate HSE department performed a thorough analysis including accidents with and without absence in the last 5 years. In the coming year, we will conduct workshops for employees and managers in targeted areas to identify new preventive actions and raise the awareness about the local risks. With this and other preventive initiatives we remain determined to reverse the increase in work-related accidents in 2017.



#### Survey and competencies tool to support dialogue, focus on development and company performance

At Lundbeck, we regularly run Employee Satisfaction Surveys (ESS). All employees are invited to respond to the same questions on a range of topics within the areas of satisfaction and motivation, including for example questions related to an individual's job, development and work environment. The ESS primarily takes place to engage employees and to provide a tool for team dialogue where topics that are most important to that team in regard to satisfaction and motivation in the workplace can be discussed. Action plans are agreed upon and implemented throughout the year.

In 2016, Lundbeck introduced a set of behavioural competencies, 'My competencies', which describe the most critical skills and behaviours needed to drive the performance and development of employees. The aim is to identify how all employees best contributes to the overall success of Lundbeck and thereby improving the lives of patients. 'My competencies' does so by outlining the most critical competencies and related behaviours needed across Lundbeck in order to successfully implement our focused strategy. 'My competencies' will be used by all employees during 2017 in relation to the performance management process where they will be used to set expectations, evaluate performance and work with individual development.

#### REACH - getting ready for important deadline

The most comprehensive and complex chemical regulation the world has ever seen is the EU regulation for the Registration, Evaluation, Authorisation and Restriction of Chemicals, also known as REACH. As a direct consequence of REACH, Lundbeck is working diligently to register all our chemicals we manufacture or import from outside the EU in quantities above 1 tonne per year. Furthermore work processes in our Chemical Production sites in Denmark and Italy are being adapted and modified to meet the REACH Strictly Controlled Conditions criteria.

By the end of May 2018, all activities in this respect must be finalised. This effort involves many employees and business areas across our European research and manufacturing organisation. During 2017, we will complete the registration dossiers for relevant substances and we will initiate the registration process. Our efforts to establish Strictly Controlled Conditions by implementing technical modifications in Chemical Production will be intensified to meet the 2018 deadline.

#### IMPROVEMENT OF ERGONOMICS IN PHARMACEUTICAL PRODUCTION

During 2016, employees and managers at our pharmaceutical production sites in Denmark and France have systematically mapped the work processes to identify areas of improvement with regard to ergonomics. This analysis led to the initiation of several corrective actions. For instance, the implementation of an improved working process significantly reduces heavy lifting at our French site. In the new process the heavy equipment is being transported on a wagon and attached without manually lifting the objects. This improvement ensures safe handling and prevents back injuries. Another benefit is that the process can be carried out by one employee instead of three. In 2017, further ergonomic improvements will be implemented.

## **ENVIRONMENT**

Lundbeck promotes environmental responsibility by optimising manufacturing processes, recycling solvents, controlling pharmaceuticals in the environment and minimising our emissions to the air of CO<sub>2</sub> and other pollutants.

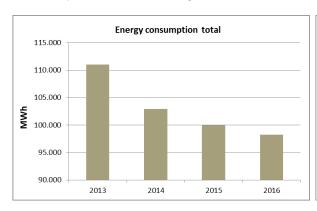
Lundbeck's research, development and manufacturing activities are based on chemical synthesis. Consequently, we use considerable amounts of organic solvents, energy and generate waste and emissions to the air. We are managing these environmental impacts effectively and we apply an integrated approach to Health, Safety and Environment (HSE) because it helps us prioritise and motivates collaboration across our global organisation.

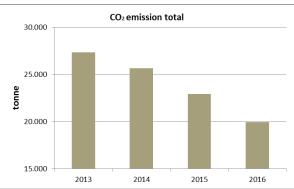
Our ambitions on environmental responsibility are cascaded from our HSE Policy and transformed into action through our HSE strategy. The strategy ensures that efforts are prioritised and coordinated to reduce our environmental footprint. For many years, the strategy has yielded a number of tangible results. For instance, at the end of 2016 we had reduced our CO<sub>2</sub> emission by 58% compared to 2006.

#### **Energy savings despite challenges**

The past year has been very challenging to Lundbeck in terms of saving energy. We have extended our manufacturing and laboratory facilities, which increased the overall energy consumption. In addition, we experienced a break down in our biofuel boiler in Lumsås (DK) and this forced us to use gasoil for a period, which has a higher CO<sub>2</sub> emission per energy unit.

Despite these challenges we reduced our overall energy consumption by 1.8% and our  $CO_2$  emission by 13% compared to 2015. The reduced energy consumption was due to termination of a research site in the US and execution of several energy reducing projects by our dedicated teams of engineers and maintenance employees. A supporting element for identifying new conservation energy projects was the successful implementation of the EU directive on energy efficiency for which we passed the external inspection in 2016. A correction of the applied  $CO_2$  emission factors contributed significantly to the reduced  $CO_2$  emission. In conclusion, we failed to achieve the established 4% reduction target for energy consumption from 2015 to 2016, while the equivalent 4% reduction target for  $CO_2$  emissions was achieved.





We remain focused and reinsured we can continue to identify and implement energy savings in 2017. Because we already have reached our long-term target of reducing  $CO_2$  emissions by 55% in 2020 compared to 2006, we will initiate the development of a new long-term target in 2017.

#### Lundbeck receives external recognition

Lundbeck has made it a priority to track and disclose our CO<sub>2</sub> emissions and this effort was acknowledged by the Carbon Disclosure Project (CDP), which is one of the leading global environmental benchmarks. The CDP benchmark rates the companies' ability to disclose and manage their greenhouse gas emissions. Lundbeck achieved the highest recognition for its climate efforts by being listed on CDP's 2016 Climate A List. Companies from all over the world were reviewed and only nine percent of these delivered sufficient efforts to get on the list.

A contributing factor for being included on the Climate A List is that Lundbeck's long-term CO<sub>2</sub> reduction target is recognised as 'Science Based' by the UN Global Compact, the World Wildlife Fund for Nature (WWF), World Resources Institute and the Carbon Disclosure Project (CDP). This level of reduction in the CO<sub>2</sub> emission is required for all nations to keep the global warming below two degrees in 2100, which is the official target of the signatories of the Paris Agreement, UN Climate Change Conference of the Parties (COP-21).

#### Monitoring pharmaceuticals in the environment

Being a research-based company, we invent new pharmaceuticals, which are essentially chemical compounds. As part of obtaining a Marketing Authorisation, we are required to evaluate the environmental impact of the active ingredients of the new product. Internally, we use this knowledge to design the manufacturing processes in a way that minimises the environmental impact. We also contribute to the development of environmentally friendly processes in regional and national industry networks.

In 2016, eco-toxicological tests on one of Lundbeck's new active ingredients were completed by external specialists. The subsequent risk assessment showed that the active ingredient is unlikely to represent a risk to the environment after patient

#### Recycling is beneficial for the environment and business

Lundbeck's chemical manufacturing site in Lumsås has implemented a process to recycle solvents. After purifying the used solvents by distillation to virgin quality, they can be reused in all processes over and over again. So far, this has successfully been adopted for toluene, tetrahydrofurane and acetonitrile. In parallel, a number of solvents are reused in specific processes.

During 2016, Lundbeck recycled 37% of the nine most used solvents. This eliminated the need to purchase approx. 1,000 tons of solvents, which consequently saved additional resources for external production and transportation. In 2016, we revised the calculation method used to determine the recovery ration. In combination with minor technical challenges and a changed product mix led to a reduced recovery ratio compared to 2015. We will continue to develop our knowledge and technical capabilities to increase the recovery of organic solvents in the coming years.

#### **GREEN CHEMISTRY PRINCIPLES APPLIED**

Scientists and engineers at Lundbeck's chemical production sites use the Green Chemistry principles defined by the American Chemical Society to optimise processes. These efforts benefit the economy, people and the planet by finding creative and innovative ways to reduce waste, conserve energy and substitute hazardous substances. At our Italian site, a Green Chemistry assessment of all chemical processes has led to environmental improvements and reduced costs. A couple of years ago, this yielded a 70% decrease of the total amount of raw materials and wastes in a smaller scale production process. In addition, the improved process made a proven genotoxic substance redundant. In 2016, a process for the large scale production of a commercial API was optimized, which led to an approx. 20% decrease of raw materials and waste. A novel process with an even lower environmental impact will be implemented in 2017.

## **KEY PERFORMANCE INDICATORS**

We consider the data presented here key indicators for Lundbeck's sustainability performance in 2016. Please visit <a href="www.lundbeck.com/global/sustainability">www.lundbeck.com/global/sustainability</a> to obtain more detailed information and data from the current and previous years.

INDICATOR		
Finished goods production	Pieces	2,229,221,757
Chemical production	Tonne	403
Raw materials, organic solvents	Tonne	3,392
Water consumption (61% potable water, 39% unfiltered water)	$m^3$	320,990
Energy consumption	MWh	98,226
CO <sub>2</sub> emission	Tonne	19,943
Waste (90% chemical waste, 10% non-chemical waste)	Tonne	11,906
Waste water	$m^3$	296,799
Environmental incidents	Number	4
Work-related accidents with absence	Number	25
Frequency of lost time accidents	Frequency	7.3
Work-related diseases	Number	1
Internal audits conducted	Number	150
External audits conducted	Number	167
Compliance Hotline reports	Number	13
Employees globally	Number	5,120

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