COMMUNICATION ON PROGRESS (COP) 2015

2015

Topsil Semiconductor Materials A/S
Company reg. (CVR) no.: 24 93 28 18

SILICON CONTRIBUTES TO THE MANUFACTURING OF ENERGY-EFFICIENT POWER COMPONENTS

CONTENTS

IT IS OUR MISSION
TO PROVIDE SOLUTIONS
THAT ENABLE CUSTOMERS TO
MANUFACTURE ADVANCED,
ENERGY-EFFICIENT
POWER COMPONENTS

Topsil Semiconductor Materials A/S hereby reconfirms its continued support of the UN Global Compact in the below statement:

March 2016

UNITED NATIONS GLOBAL COMPACT

On behalf of Topsil Semiconductor Materials A/S, I hereby reconfirm our company's continued support of the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labour Rights, the Environment and Anti-Corruption. We continuously acknowledge our responsibility to balance the business interests of our company with those of our external environment and commit to share our efforts and concerns with our main stakeholders.

In this annual Communication on Progress, we describe the actions taken in the past year to improve our performance in CSR-related matters as well as the goals set for 2016.

In 2015, our main focus was the commissioning of the new factory, a new state-of-the-art ultrapure silicon production site. The new plant features more eco-friendly equipment and solutions, and high-tech systems allow us to continually fine-tune our use of resources to a much wider extent than before.

For 2016 we plan to continue our relentless pursuit for more resource-efficient manufacturing processes.

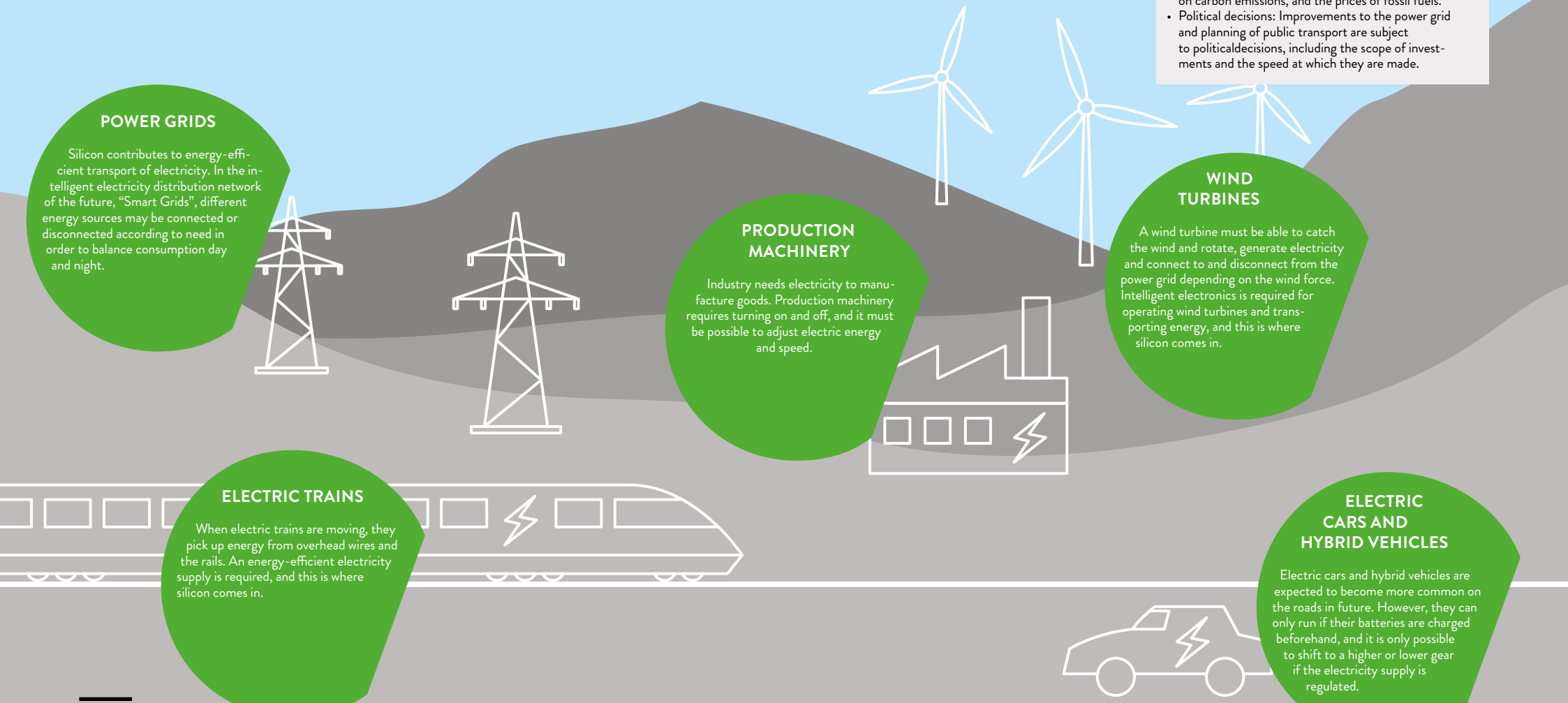
It is our firm belief that our year-on-year targets and reporting help us stay on track on our journey towards a more sustainable existence. Not only do they help us use fewer resources and mitigate our business risks, thereby making Topsil stronger, they also contribute to ultimately making our world a little greener.

Kalle Hvidt Nielsen
CEO

SILICON IS USED IN ALL PARTS OF MODERN SOCIETY

MEGATRENDS

- The world's rapidly growing middle classes demand modern convenience, such as access to a stable power supply, well-functioning public transport, cars, domestic appliances, etc.
- The development of green technologies, driven by increased concerns about more pollution, focus on carbon emissions, and the prices of fossil fuels.
- Political decisions: Improvements to the power grid and planning of public transport are subject to politicaldecisions, including the scope of investments and the speed at which they are made.



POWER GRIDS

Silicon contributes to energy-efficient transport of electricity. In the intelligent electricity distribution network of the future, "Smart Grids", different energy sources may be connected or disconnected according to need in order to balance consumption day and night.

PRODUCTION MACHINERY

Industry needs electricity to manufacture goods. Production machinery requires turning on and off, and it must be possible to adjust electric energy and speed.

WIND TURBINES

A wind turbine must be able to catch the wind and rotate, generate electricity and connect to and disconnect from the power grid depending on the wind force. Intelligent electronics is required for operating wind turbines and transporting energy, and this is where silicon comes in.

ELECTRIC TRAINS

When electric trains are moving, they pick up energy from overhead wires and the rails. An energy-efficient electricity supply is required, and this is where silicon comes in.

ELECTRIC CARS AND HYBRID VEHICLES

Electric cars and hybrid vehicles are expected to become more common on the roads in future. However, they can only run if their batteries are charged beforehand, and it is only possible to shift to a higher or lower gear if the electricity supply is regulated.

CSR ACTIVITIES EMBEDDED IN OUR EVERYDAY BUSINESS

In Topsil's view, each CSR activity should be an integral part of our day-to-day business in order to obtain the maximum benefit. Such approach fits nicely with Topsil's strategy in which a key focus area is to increase our efficiency and output.

In support of this, our production and technical managers for instance consider resource minimisation part of their jobs. This becomes particularly relevant when purchasing new equipment or when improving already installed mechanical and other systems in our plants.

Likewise, our production managers hold overall responsibility for employee safety, including training. This makes good sense as most of their staff is operating machinery on a daily basis.

WE FOCUS ON OUR OWN BUSINESS IN PARTICULAR...

Topsil has developed the below model to visualise how we deal with CSR-related matters. The sphere of control has high priority, as we have direct influence on it. On a continuous basis, we pay a lot of attention to identifying the improvement potential in-house and we continually monitor our performance by setting concrete targets followed up regularly at dedicated management evaluation meetings. New knowledge and experience is included in the company's policy framework as well as updated guidelines enabling everybody to support our overall goal.

EXTERNAL STAKEHOLDERS ARE IMPORTANT, TOO

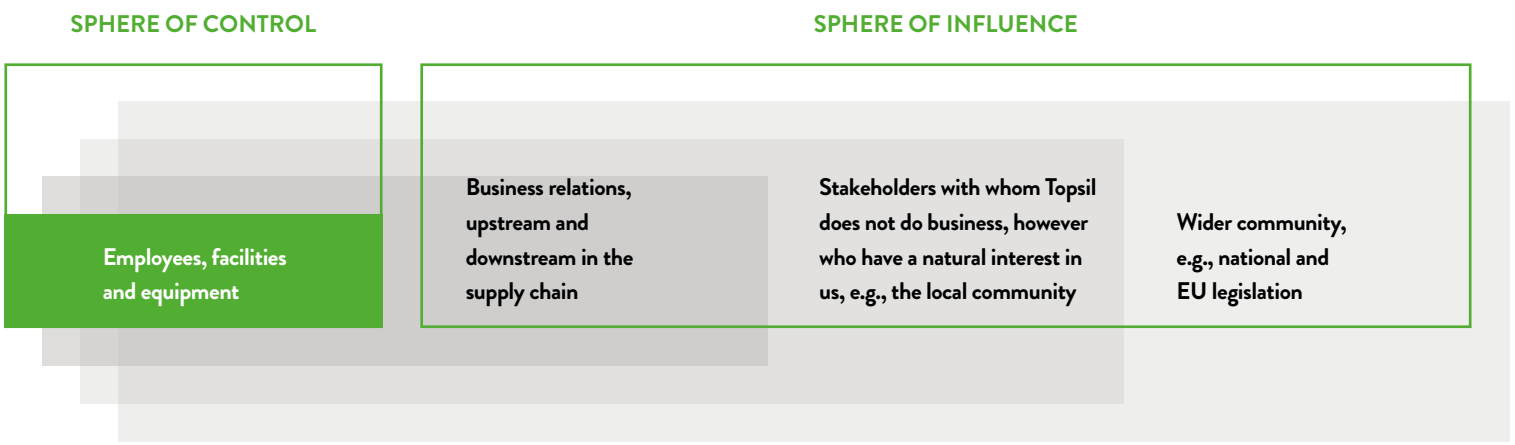
Our sphere of control, however, does not stand alone. We have close ties with our suppliers and customers, amongst others. Our customers care as to under which circumstances we manufacture silicon wafers. Concerning our suppliers, we make sure we look into their procedures and way of conducting business.

One way of addressing this is using of our supplier handbook which stipulates evaluation criteria for selecting and assessing suppliers. Such evaluation is related to risk management, amongst others, and includes CSR-related matters. The handbook thus serves as a tool to address corporate social responsibility matters in our supplier relations.

In a broader stakeholder perspective, Topsil interacts with its local community, national authorities and similar stakeholders. Topsil's main objective in this contect is to retain its "licence to operate", measured as its goodwill earned in the wider society. Topsil seeks to influence such stakeholders wherever applicable.

This kind of influence is usually related to influencing framework conditions, maintaing good neighbour-relations, or attracting new members of staff.

It is Topsil's ambition to communicate openly, accurately and reliably with all stakeholders.



HUMAN RIGHTS PRINCIPLES

Topsil supports the following human rights principles

- **PRINCIPLE 1: Businesses should support and respect the protection of internationally proclaimed human rights; and**
- **PRINCIPLE 2: Businesses should make sure that they are not complicit in human rights abuses**

POLICY ON DIVERSITY

Operating globally, Topsil regards a diverse workforce as an asset. We hire on the basis of talent and personality and offer equal opportunities to all employees, regardless of their background, religion, political conviction, gender or age. We encourage everyone to try to reach their full potential in accordance with their personal ambitions and goals.

We promote a work environment of respect and inclusion and expect our employees to be politically and religiously neutral when acting on the behalf of the company. We acknowledge the right to unionise and bargain collectively and do everything in our power to avoid discrimination.

POLICY FOR THE UNDERREPRESENTED GENDER IN MANAGERIAL POSITIONS

In selecting new candidates for Topsil's Board of Directors, it is important that candidates have specific professional competencies and qualifications from listed companies and international experience. In addition, consideration concerning diversity in terms of nationality, religion, political conviction, age and gender applies. Specifically in respect of gender, Topsil aims to retain and, if possible, increase the number of women on the Board of Directors over the coming three years. To be able to meet this goal, Topsil will ensure that, during potential recruitment processes, employees and external partners involved will be fully informed of the Company's diversity policy.

With regard to women in managerial positions, Topsil is currently under-represented on the Management Board as well as in management and middle-management. It is Topsil's goal to increase the number of women in managerial positions by having a number of qualified female candidates for future management positions. Hence, in hiring processes, Topsil will instruct its recruitment agencies to act accordingly.

STATUS OF GENDER BALANCE, MANAGERIAL POSITIONS, 2015

The current gender balance of Topsil's managerial positions is outlined below.

The Board of Directors did not replace any of its members in 2015.

Regarding other management, the total number of management employees was reduced by one in 2015. The number of female managers went up by one from six to seven.

MOST RECENT ACTIVITIES

Employee representatives were elected to the Board of Directors in 2015 pursuant to the provisions of the Danish Companies Act. Jesper Leed Thomsen was re-elected and Sune Bro Duun elected for a four-year period.

PLANNED ACTIVITIES 2016

Employee survey to be conducted in early 2016.

ONGOING ACTIVITIES

According to EU legislation, Topsil convenes works council meetings on a regular basis, in which representatives from management and appointed employees are able to discuss the general situation and working climate of Topsil. The minutes of these meetings are communicated to local staff.

Topsil conducts a biannual employee survey to monitor employee satisfaction and establish a platform from which possible action can be taken.

Topsil's aggregated distribution of gender, age and ethnicity is publicly available here: http://www.topsil.com/en/career/personnel-figures.aspx

STATUS OF GENDER BALANCE, MANAGERIAL POSITIONS

	Males	Males	Females	Females
	2014	2015	2014	2015
Board of Directors	4	4	0	0
Other managerial positions (DK, PL)	20	19	7	8
Total	**24**	**23**	**7**	**8**

SCALING DOWN RESOURCE CONSUMPTION AT PRODUCTION PLANT TO BE IN TUNE WITH THE NEEDS

The new Topsil plant offers many options for smart control of resource consumption through the CTS system (CTS: Central Tilstandskontrol og Styring – translates to "central monitoring and management of conditions"). The very first efforts to exploit these options were concentrated around scaling consumption to follow capacity and those efforts were continued in 2015. This basically means reducing excess resource expenditure, thereby saving money for the company as well as minimising impacts on the external environment. With data continually collected by the CTS and correct automatic settings, a high degree of such fine tuning is possible.

ELIMINATION OF EXCESS COOLING FOR PRIMARY PRODUCTION EQUIPMENT

In terms of economy, the main achievement has been to shut off cooling water for our primary production machines individually, when they are not engaged in a production run. This equipment, called Float Zone pullers, requires a substantial amount of cooling and represents annual expenditure upwards of DKK 500,000 for cooling alone.

Cooling water used to flow in a single circulation system for all machines at all times, but this has now been modified with valves hooked up to the CTS system. By cutting off the flow to inactive machines, power consumption for cooling has been reduced by at least 50%. A quite significant reduction.

As of yet, control of the valves is performed by operators, but once the automatic valve control has been sufficiently tested, the CTS will completely take over this operation completely, to maximise savings and benefits.

INCREASED SYMBIOSIS BETWEEN HEATING AND COOLING SYSTEMS

Excess heat created by the main production equipment, the float zone pullers, is used to heat up the factory. This is done by diverting the heat to a hot

water buffer tank whenever it is low on hot water. If there are no production runs going on at that point, the buffer tank will be heated by electrical power, which is four times more expensive than using excess heat from production. The excess production heat, on the other hand, is discharged to the external environment if there is no need to heat up the buffer tank water.

Until recently, the two systems operated independently in the sense that no real-time alignment of the systems existed. The heating of the buffer tank took place without regard for the presence or absence of excess production heat. Similarly, the discharge of excess production heat took place without regard for imminent needs of hot water.

What has been achieved now is a much better symbiosis between the two systems, in that the buffer tank will now automatically be topped off in a situation where excess heat is being produced, before it is discharged externally.

This improvement in terms of better retention of energy is hard to quantify because benefits depend on the outside temperature (i.e. the weather). A very rough estimate would be that the conditions for exploiting excess heat in this way would arise a couple of times daily during winter and thus lead to a corresponding reduction in electrical power consumption.

REDUCED CHEMICAL SCRUBBER OPERATION

The chemical scrubber – a large air pollution control device – at Topsil is a critical piece of equipment that requires continual operation, due to the presence of certain acidic chemicals in various parts of the plant. Scrubber operation consumes water as well as chemicals and gives rise to a sizable amount of airflow within the ventilation system.

As long as the acids are present at the production departments, the scrubber needs to be operational and continually extract air from the departments, maintaining a stable air pressure level. However, during periods when no active production gives rise to chemical reactions, the scrubber flow can be reduced accordingly. This is mainly during weekends, but may also apply to various production interruptions.

Once the scrubber runs at reduced flow, 40-50% less water and chemicals are used with a corresponding reduction in airflow from the etching areas – and hence, reduced discharge of chemically processed air to the external environment. The reduced airflow comes with a secondary bonus in heating of the same areas, normally ventilated by a fresh air system that otherwise requires an extra amount of electrical power consumption for temperature control.

CONTINUAL IMPROVEMENTS

In addition to these three main points of improvement, there are ongoing efforts to fine tune other resource expenditure, especially with regard to the ventilation system, where the main benefits have already been reaped. This is likely to be the case for some of these latest improvements as well, with the CTS system providing new avenues of development as ever more data on the facility is accumulated.

"By cutting off the flow to inactive machines, the power consumption for cooling is reduced by at least 50%"

LABOUR RIGHTS PRINCIPLES

Topsil supports the following labour rights principles

- **PRINCIPLE 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;**
- **PRINCIPLE 4: Businesses should uphold the elimination of all forms of forced and compulsory labour;**
- **PRINCIPLE 5: Businesses should uphold the effective abolition of child labour; and**
- **PRINCIPLE 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.**

POLICY ON SAFETY

Safety must be a priority for all Topsil employees.

Topsil believes that all injuries are preventable, all health risks are controllable and management is accountable. Topsil also believes that a strong safety culture is an important tool for protecting our products and customers.

Literally speaking, we want our staff to go home from work as healthy as they were when they arrived at their work place. In order to attain this goal, it is a continuing objective to prevent injuries and work-related health risks through structured effective management, administration, education and training.

MOST RECENT ACTIVITIES

In 2015, Topsil continued to focus on improving its safety culture. LEAN tools as fish bone analysis were used to analyse accidents and near-miss accidents to avoid recurrence. In this respect, the new facility represents a huge step forward, especially regarding handling of chemicals. Safety drills were also used to familiarise our staff with our new facility. The corporate figures of our performance are presented to management on a regular basis.

PLANNED ACTIVITIES 2016

For all sites, our overall goal for safety remains unchanged: Zero accidents.

ONGOING ACTIVITIES

Pursuant to national legislation in Denmark and Poland respectively, a health and safety body has been established at each company location. The safety organisation consists of management and staff representatives which holds overall responsibility for Topsil's health and safety performance. The body oversees compliance with applicable legislation and plans activities to minimise safety risks. It is also responsible for conducting workplace evaluations and implementing improvements. The production manager is head of the health and safety organisation.

ENVIRONMENTAL PRINCIPLES

Topsil supports the following environment principles

- **PRINCIPLE 7: Businesses should support a precautionary approach to environmental challenges;**
- **PRINCIPLE 8: Businesses should undertake initiatives to promote greater environmental responsibility; and**
- **PRINCIPLE 9: Businesses should encourage the development and diffusion of environmentally friendly technologies**

POLICY ON THE ENVIRONMENT

Topsil continuously strives to reduce the environmental impact of our operations by integrating environmental consideration into any activity with an environmental impact.

We give priority to areas where we believe the effect will be greatest, and we commit to working methodically with reducing our energy consumption and waste, year on year.

MOST RECENT ACTIVITIES

In 2015, Topsil met its goals concerning consumption of energy, water and chemicals as well as waste handling. The corporate environmental performance figures were presented to management at a regular management evaluation meetings. Topsil Poland in particular focused on raising employee awareness regarding resource consumption.

PLANNED ACTIVITIES 2016

For 2016, new targets for further improvements have been set. In Poland, the ongoing activities focusing on resource usage awareness will be sustained.

ONGOING ACTIVITIES

The managerial framework for driving and monitoring Topsils's environmental performance is the ISO14001 standard to which all production sites are certified. In Denmark, Topsil also uses the ISO/TS 16949 quality management system for supply chain assurance. In 2015, Topsil was re-certified to both standards for a new three year.

ANTICORRUPTION PRINCIPLE

Topsil supports the following anti-corruption principle

- **PRINCIPLE 10: Businesses should work against corruption in all its forms, including extortion and bribery**

GUIDELINES ON ANTI-CORRUPTION

It is Topsil's fundamental principle that any business activity and relation with customers, business partners and authorities must be honest, fair and transparent and in compliance with applicable laws. We explicitly do not accept bribery or facilitation payment in any form, and we do not permit gratitude activities between private individuals.

Topsil has adopted an internally communicated set of guidelines concerning business-related gratitude, i.e. how we handle gifts, entertainment and hospitality provided by Topsil and its business partners.

MOST RECENT ACTIVITIES

In autumn 2015, Topsil implemented a corporate whistleblower scheme in cooperation with an independent third party provider to ensure a high level of security and confidentiality. So far, the whistleblower scheme is available by the parent company in Denmark.

The whistleblover scheme enables employees to report activities that may involve criminal conduct or violations of Topsil's company polities. It can be used for reports such as:

- Theft, corruption and embezzlement
- Physical or sexual violence
- Substantial violence of safety at work, environmental rules and pollution of the environment

PLANNED ACTIVITIES 2016

An awareness campaign concerning the new whistleblower scheme will be launched in 2016.

During 2016, Topsil expects to prepare a whistleblower scheeme for its subsidiary Topsil Semiconductor Materials S.A. in Poland.

ONGOING ACTIVITIES

The anti-corruption guidelines are reviewed by management on a regular basis.

ADDITIONAL INFORMATION

COMMUNICATION OF OUR COP REPORTING

- Topsil's COP for 2015 is published on Topsil's website www.topsil.com
- Topsil's COP for 2015 is published on the UN Global Compact website www.unglobalcompact.org
- Topsil's COP for 2015 is published on Topsil's intranet
- Topsil's COP for 2015 will be communicated to our suppliers

REPORTING PERIOD:

This report focuses on the results of activities for Topsil's financial year 2015 (from 1 January 2015 through 31 December 2015).

PUBLICATION :

Topsil signed the UN Global Compact on 8 March 2011
Current issue: March 2016
Next issue: Scheduled for March 2017, covering FY 2016

FURTHER INFORMATION :

Further information on Topsil Semiconductor Materials A/S to be found on www.topsil.com
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