

- Unrestricted

# Report

## Communication on progress (COP)

Annual report to United Nations Global Compact

**Author(s)**

Tom Berland



**SINTEF Group Head Office**

Address:

Postboks 4760 Sluppen  
7465 Trondheim

Telephone: 73593000

Direct line: 73593063

Telefax: 73593350

info@sintef.no

www.sintef.no

Enterprise /VAT No:

NO 948 007 029 MVA

# Report

## Communication on progress (COP)

Annual report to United Nations Global Compact

**KEYWORDS:****VERSION****DATE**

2012-08-29

**AUTHOR(S)**

Tom Berland

**OPPDRAGSGIVER(E)****OPPDRAGSGIVERS REF.****PROJECT NO:****NUMBER OF PAGES/APPENDICIES:**

10 / 1 Appendix

**ABSTRACT****PROJECT MANAGER****SIGN****CHECKED BY****SIGN****APPROVED BY (name, position)****SIGN****REPORTNO.****ISBN****CLASSIFICATION**

Unrestricted

**CLASSIFICATION THIS PAGE**

Unrestricted

# Table of contents

|          |   |           |
|----------|---|-----------|
| <b>1</b> | <b>Preface.....</b>   | <b>4</b>  |
| <b>2</b> | <b>Statement of continued support – Technology for a better society .....</b>       | <b>4</b>  |
| <b>3</b> | <b>Human rights .....</b>   | <b>5</b>  |
| 3.1      | Examples of research activities in Global Health .....                              | 5         |
| <b>4</b> | <b>Labour .....</b>   | <b>6</b>  |
| 4.1      | SINTEF research on labour conditions and technology management.....                 | 7         |
| <b>5</b> | <b>Environment .....</b>  | <b>7</b>  |
| 5.1      | Examples from SINTEF's research on energy and environment.....                      | 7         |
| 5.1.1    | Research on Industrial Co-processing.....   | 7         |
| 5.1.2    | Research on environmental-friendly energy and energy materials technology .....     | 8         |
| 5.1.3    | Research on clean water technologies and water distribution systems.....            | 9         |
| <b>6</b> | <b>Anti-corruption .....</b>  | <b>9</b>  |
|          | <b>Appendix A Relevant examples from SINTEF's research activities in 2011 .....</b> | <b>10</b> |

# Communication on progress (COP)

## 1 Preface

SINTEF became member of UN Global Compact in January 2009, and this is our second communication of progress report.

SINTEF is an independent research and technology not-for-profit organisation, providing R&D services to clients in Norway and abroad. However, as we have no production or manufacturing activities, the number of suppliers and subcontractors is rather low, and the vast majority of service activities in SINTEF are performed within Norway even for projects with international clients. It should also be mentioned that most of our international clients are companies based in Europe or North America, i.e. countries where the UN Global Compact principles are reasonably well in accordance within the national legislations.

As SINTEF's direct activities by themselves is largely performed in good accordance with the UN Global Compact principles, this COP will mainly describe the content of our research activities for our clients and how the results from this research may have an impact on the global environment and society in a way that will support the ten principles. Here it should also be noticed that SINTEF also have a small research group assisting clients directly in developing and improving their corporate social responsibility (CSR) performance, including studies of the impact of various CSR practices.

## 2 Statement of continued support – Technology for a better society

SINTEF's vision is "Technology for a better society". This vision both inspires and commits us.

We are committed to contribute to a sustainable future, to human rights, labor rights, sound environment and anti-corruption and to comply with the ten universal principles of the UN Global Compact.

SINTEF acts in accordance with the principles both by doing research that contributes to a better society, and by the way we conduct our own operations. This Communication on progress demonstrates some of our efforts during the last year. This expresses our continued support for the principles and ongoing commitment to the initiative and its principles.

Research and innovation are extremely important tools for constructing a high-quality future. Together with good legislation, regulations and investment, knowledge plays a decisive role in developing and guaranteeing jobs for the future, developing the wellbeing of society and enabling us to solve major global problems.

Our most challenging tasks are derived from basic facts and trends: population growth, huge divergences between rich and poor, and limited resources. The resulting challenges are complex, and solving them will require integrated efforts, alterations in behavior and changes in technology. None of these will be possible without major investments in research and innovation.

The development of new technology requires high scientific quality, the ability to innovate, national and international collaboration at all levels, and good political leadership. We need to change our behavior in many areas; society as a whole will have to be involved, and the dialogue between research and society must be improved. We all share responsibility for this process, both as researchers and as citizens.

Unni Steinsmo  
President of SINTEF



### 3 Human rights

All activities in SINTEF shall adhere to the principles laid down in our [ethical guidelines document](#). This document states among others that:

- SINTEF shall always ensure neutrality related to all political parties in their activities
- SINTEF shall value all humans equal, and no discrimination will be tolerated, whether on grounds of race, gender, religion, sexual orientation, or age.
- Employees of SINTEF have the right to deny the participation in research project if the content of the projects are in conflict with their personal religious or ethical conviction.
- SINTEF shall strive to achieve a good work environment characterized by equality and equal opportunities.

In order to ensure that these principles are followed, management procedures in SINTEF include the following tools:

- The document “SINTEF statement of corporate business ethics and social responsibility on entry into contracts”, which are used as a addendum to all international contracts to ensure that our clients are not in direct conflict with the ten principles.
- The document “Supplier Evaluation Questionnaire”, which must be submitted and accepted for all major suppliers to SINTEF before contracts of delivery may be signed.
- Participation in national Research Ethics Committees
- SINTEF Ethical Ombudsman, whose responsibility is to investigate whether our ethical principles are followed, and to receive and handle ethical complaints from employees or clients. This work has been further strengthened in 2011 by introducing a routine for treating any complaints regarding the behavior of our employees.
- Ethics module in SINTEF internal training courses for new employees and new managers.
- Ethics module easily available from the front page of the SINTEF intranet.

Whenever SINTEF wants to establish a new international office abroad, a risk analysis shall be performed, where ethics and CSR aspects will be part of the analysis. A similar risk analysis will be performed for projects where part of the work will be performed in a country outside EU, Canada or US.

SINTEF also contributes to the improvement of global human rights is our research activities within our research unit ”Global Health”.

#### 3.1 Examples of research activities in Global Health

The research unit ”Global Health” is composed of two groups of researchers, where the first one works on the development of health services for the population in poor countries, and the second sub-unit concentrates on the improvement of life conditions for disabled persons and other vulnerable population groups.

They are currently involved in the following projects:

- In Venezuela and South Africa, we study the effect that large-scale political change has had on health worker policy.
- In Nepal, we explore the acceptability of using volunteer health workers from the perspective of policy makers and the volunteers themselves.
- In Norway, we study people’s experiences of living with a rare disorder and the manner in which they are treated by health and social services.
- In Southern Africa, we study the acceptability of health services and perceptions surrounding sexuality, HIV/AIDS, and health.
- in Sub-Saharan Africa we map the living conditions of vulnerable groups, explore the causes of poor access among groups, both on an individual and a broader social and political level, and collaborate with local groups in the production and distribution of assistive devices.

More details on research activities in 2011 may be found in Appendix A.

## 4 Labour

SINTEF policy on employees focuses on the following principles:

- SINTEF is to be an attractive place to work offering unique prospects for those with the ability and drive to develop their potential
- SINTEF is to ensure that high ethical standards and awareness of Health, Safety and Environment (HSE) are applied to all of its activities
- SINTEF is to offer a work environment in which its staff are respected and appreciated, and where they are given the opportunity to develop their abilities in cooperation with their colleagues
- SINTEF is to offer professional challenges and tasks that have a high value for its customers and society
- SINTEF is to recruit and keep competent people in a global labour market
- SINTEF is to encourage team spirit, creativity and initiative in its scientific groups
- SINTEF is to develop leadership that is explicit, inclusive and inspiring

To increase our focus on these themes, to exchange experience with other research institutions about HR-strategies, and to further commit ourselves to these principles, SINTEF has signed the European Charter for Researchers and the Code of Conduct for Recruitment of Researchers. We are also participating in the common development of HR strategy for researchers.

SINTEF involves their trade union organizations in all discussions regarding issues involving employees and organizational changes. Our employees are organized within 5 different organizations, and SINTEF maintain an identical collective agreement with all of these. In addition to questions of remuneration, the collective agreement regulates issues like

- Equal rights policy
- Recruitment policy
- Advancement policy
- Employee representation in the SINTEF Council and the SINTEF Board

Membership in trade unions is voluntarily, and member lists are confidential. However, the number of member in each of the 5 organizations in SINTEF is public, and shows that 67% of our employees have chosen to become a trade union member.

By the UNIVERSUM evaluation of attractive working sites, the Norwegian University Students within technology ranks SINTEF among the most attractive employers in Norway.

SINTEF employees are strongly involved in the development and implementation of HSE policies. This happens both through their elected HSE representatives, but also through strong awareness and considerations in their research activities. Every second year SINTEF issues a major anonymous inquiry among all employees, in order to evaluate the state of the working conditions and working environment. The result of this inquiry is distributed to all managers in our organizations, and their management performance is subsequently measured by how well they manage to improve conditions based on the inquiry.

When the English language version of International Standard ISO 26000:2010 were adopted as Norwegian Standard NS-ISO 26000: 2010 in November 2010 (Guidance on social responsibility), SINTEF started a project to compare our policies practice with the recommendations given in this Standard. This work will be finished in 2012.

SINTEF has also entered into a framework agreement with Norwegian State authorities regarding the integration of employees with temporary or permanent work disability (the “IA treaty”). This agreement requires that attending companies should strive to obtain the following three main goals:

- Reduced sickness absence
- Increased number of disabled employees
- Increased retirement age

Except for a few (<10) representatives at our Houston and Rio de Janeiro offices, all SINTEF employees work in our research facilities in Norway and Denmark. However, SINTEF recruits scientific personnel of all nationalities, and presently persons from 67 different countries work in our organizations. SINTEF provides training courses for employees in Norwegian and English language, in addition to offering Norwegian language courses to our foreign employees.

#### **4.1 SINTEF research on labour conditions and technology management.**

SINTEF's research unit on labour research is managing research projects with the aim of supporting and encouraging freedom of organization, right to collective bargaining, and the elimination of discrimination against employees and employee groups. Such research has been part of various SINTEF units for more than 50 years. As part of this activity, SINTEF has during the last two years:

- Participated in the governmental committee on corporate democracy and employee participation.
- Participated in the European FP6 project "WORKS" on understanding and development of business-employee co-operation in the EU.
- Participated in the European project "Walqing" on qualitative improvement of working conditions in expanding business sectors.
- Participated in the European research network "EESUN", a network of researchers and consultants working on labour science and employee participation issues.
- Conducted an evaluation of the Norwegian "IA Treaty" for the period 2001-2009.
- Conducted a study on the usability for "adaption guarantees" as a tool to improve increased employment for permanently disabled persons.

### **5 Environment**

The environmental policy document of SINTEF states that our organization shall consider the principle of sustainable development in all their activities, including business management, social responsibility and environmental protection. Both in our research activities and in our daily business management SINTEF shall provide for the adequate protection of our external environment. Our policy shall ensure that our organization is continuously improving its environmental performance.

In short, SINTEF will:

- contribute to the establishment of national and international R&D programmes aimed towards development of environmental-friendly technologies
- increase the emphasis on environmental issues in our development of laboratories and knowledge
- in our own business activity, work for the constant reduction of climate gas emissions and energy consumption, and avoid release of potentially harmful substances to earth, water or air.
- communicate our knowledge and provide terms for society debates on development of national and international environmental policies.

SINTEF aims to satisfy the requirements for certification by the international ISO 14001 standard. The first sub-unit of SINTEF was certified in 2011.

However, the major contribution from SINTEF to the fulfillment of the UN Global Compact principles is our extensive research activity within energy and environmental research for our clients. When our clients apply new environmental-friendly technology developed by SINTEF, the global ecological footprint is reduced far more than what is possible by implementation of improved environmental performances within our own activities.

#### **5.1 Examples from SINTEF's research on energy and environment**

More details on our research activities may be found in Appendix A.

##### **5.1.1 Research on Industrial Co-processing**

SINTEF has developed a strong international activity on "Industrial Co-processing", that is the utilization of industrial and hazardous waste materials in the industrial production of cement and concrete. Following prototype activities in Norway, this research field is now part of strong bilateral agreements between Norway and India/China.

SINTEF is currently involved in the following projects:

- Strategic cooperation with Asian Institute of Technology on Hazardous Chemicals Management
- Strategic cooperation with Ministry of Environmental Protection, China, on Environmentally Sound Management of Hazardous and Industrial Wastes in Cement Kilns
- Strategic cooperation with Central Pollution Control Board, India, on recovery of alternative fuels and raw materials and treatment of organic hazardous wastes in resource and energy intensive industry.

The three mentioned projects will contribute to strengthen the compliance with the Stockholm and the Basel Convention, the Montreal Protocol, the UN framework Convention on Climate Change and the Strategic Approach to International Chemicals Management (SAICM).

#### **5.1.2 Research on environmental-friendly energy and energy materials technology**

SINTEF initiates R&D in order to promote cost-effective and environmentally friendly solutions for energy consumption and the supply of power and heating. This contributes to reducing environmental loads, increasing value creation for the companies in this sector and thereby achieving better utilization of energy resources for society.

We also make significant contributions towards increasing the development and recovery of Norwegian petroleum resources in an environmentally friendly and secure manner thanks to new technologies developed for oil companies and the related service industry.

SINTEF is currently involved in seven large research centers:

- BIGCCS Research Centre for enabling sustainable power generation from fossil fuels based on cost-effective CO<sub>2</sub> capture, safe transport, and underground storage of CO<sub>2</sub>
- NOWITECH (Norwegian Research Centre for Offshore Wind Technology), a centre for pre-competitive research on cost-effective offshore wind farms. Emphasis is on “deep-sea” (plus 30 meters) including bottom-fixed and floating wind turbines.
- CEDREN (Centre for Environmental Design of Renewable Energy), where the aim of the centre is to develop and disseminate effective design solutions for renewable energy production that take adequate account of environmental and societal issues, both locally and globally.
- ZEB (The Research Centre on Zero Emission Buildings), a centre for the development of competitive products and solutions for existing and new buildings that will lead to market penetration of buildings that have zero emissions of greenhouse gases related to their production, operation and demolition.
- CENBIO (The Bioenergy Innovation Centre), whose objective is to develop the basis for a sustainable, cost-effective bioenergy industry in Norway in order to achieve the national goal of doubling bioenergy use by 2020.
- The Norwegian Research Centre for Solar Cell Technology aims at further developing the strong, Norwegian photovoltaic industry and substantially contributing towards making solar energy a significant renewable energy source.
- CENSES – Centre for Sustainable Energy Studies – contributes to improved scientific knowledge to promote an environmentally friendly energy system. The aim is to strengthen the understanding of the economic, political, social and cultural sides of development and introduction of new renewable energy and environmental technology.

SINTEF also executes several other R&D projects for national and international clients connected to:

- development and production of solar cell materials with higher efficiency
- development, design and construction of more effective wind power generator mills
- more effective use of bioenergy
- development of methods and processes for improved CO<sub>2</sub> capture from power plants based on gas and coal combustion
- recycling of materials, in particular recycling of aluminium metal
- improved production of high-grade products from recycled aluminium



### 5.1.3 Research on clean water technologies and water distribution systems

SINTEF has a comprehensive long time research experience in the field of water and wastewater and recognizes that the supply of good, safe drinking water is one of the big challenges in the future. SINTEF has developed strong research groups working with development of clean water technologies and safe and efficient water distribution systems. To further multi disciplinary research in the water sector SINTEF has recently started a strategic project, "Clean Water".

SINTEF has recently been leading several EU projects (CARE-W, CARE-S, CITYNET) and has been one of the main participants in the EU-project TECHNEAU (safe water supply from source to tap).

Currently we are involved in the following EU projects:

- PREPARED (adaptation of water and wastewater systems to climate change impacts)
- TRUST (transition to future sustainable water and wastewater systems)

The technologies developed in the CARE-W/-S and Technau projects are presently applied in major cities in Europe and North America. SINTEF is also working to enter into projects with local partners in Africa and India in order to implement these technologies and results from our water activities in other areas.

## 6 Anti-corruption

SINTEF executes a strict policy regarding corruption in all its forms. Our ethical guidelines document states that “...*Corruption undermines confidence in a state governed by law and in democratic institutions, weakens ethical and moral values, hinders rationalization and efficiency and undermines all forms of business activity and free competition. Corruption damages our good name and puts SINTEF and the individual at risk. SINTEF distances itself from all forms of corruption and will actively work to ensure that it does not occur in our commercial activity.*”

The document also states that SINTEF will work to prevent practices of minor payment and that SINTEF will compete on a fair and ethical basis within the framework of current rules of competition, and will not prevent others from competing with us.

The anti-corruption ideas are mandatory topics in internal training courses for new employees and new managers, but are also regularly discussion topics on larger management meetings.

In order to further support this policy, SINTEF has since 2007 been a member of the international anti-corruption organization Transparency International.

To make sure that corruption practices are not developed in any parts of the organization, SINTEF encourages whistle-blowing and has established anonymous reporting channels to the ethical ombudsman in SINTEF.

## Appendix A

*In this appendix we present some examples on our research activities in 2011, relevant for the Global Compact issue areas. The descriptions have previously been published on SINTEF's web during 2011, and are linked to the web-site:*

### **Honoured in Brussels for exploiting unutilised energy sensation**

A Nobel Prize was awarded when "high-temperature superconductors" were discovered in 1986. Now the world has at last found an application for lossless conductors, thanks to two Norwegians who received a European "Innovation Oscar" on Wednesday for their pioneering work. [Read more](#)

### **Ocean prophets**

They can predict the direction an oil spill will take, or if salmon lice will infect a neighbouring fish farm. [Read more](#)

### **Towards the safer use of nanoparticles**

What kind of HSE know-how do we really need to manage the new substances now found in everything from our clothes to cosmetics and electronics? Are nanoparticles harmful to the environment – or are these invisible particles safer than we think? [Read more](#)

### **Mathematics will increase aluminium recycling**

Using mathematical models, Norwegian research scientists and Scandinavian industry are working on tailoring alloys which will increase the usefulness of recycled aluminium. [Read more](#)

### **Kelp farming is on its way**

An underwater "field" as big as a Norwegian county could provide two billion litres of kelp-based fuel a year. SINTEF is currently establishing a centre of expertise that will enable us to cultivate seaweed and kelp on a large scale. [Read more](#)

### **EU's "DemoCLOCK" project will cut cost of capturing CO<sub>2</sub>**

A project funded by the European Union and led by SINTEF in Norway with ten other European partners aims to demonstrate a cost-effective CO<sub>2</sub> capture technology that could herald a new generation of power-generation plants with integrated CO<sub>2</sub> capture. [Read more](#)

### **A lightweight with super strength**

Almost 10 years ago, an e-mail with an unusually daring request was received by SINTEF's concrete researchers. Could they create a material the likes of which the world had never seen before? [Read more](#)

### **With your heart in his hands**

SINTEF researcher Frode Strisland's computer displays a row of green indicators. They are telling him that somewhere in South Carolina, an elderly lady with a heart problem is fine today, and that she is being well looked after by the local health staff, even though she is alone in her home. [Read more](#)

### **Extra effort for the climate's sake**

Something more than just another ridge: Svelvik Ridge in South Norway has become an environmental laboratory, with the task of ensuring that CO<sub>2</sub> can be safely stored in geological strata. [Read more](#)