### CORPORATE SOCIAL RESPONSIBILITY REPORT 2015

COMMUNICATION ON PROGRESS - OUR ACTIVITIES IN 2014 AND 2015 - OUR FOCUS IN 2016



The expert in WATER ENVIRONMENTS



#### CHIEF OPERATING OFFICER STATEMENT

Water is a prerequisite for human life and it is a key element in creating a sustainable future for a growing world. At DHI, we care about sustainability and solutions for society – now and in the future. Our quest is to solve the world's toughest challenges in water environments. With the work that we do, we can continue to make a difference.

Whether at sea or on land, you can find ongoing DHI projects. As a global company, we share knowledge on water across continents. The more we share, the larger impact we can make. Developing and integrating sustainable and environmentallysound water management solutions for society is part of our DNA as well as an essential part of our mission and values.

We strongly support the United Nations (UN) Global Compact's efforts in the areas of human rights, labour, environment and anti-corruption. We continuously strive to develop our global activities in order to support the Compact's ten principles.

I am pleased to reaffirm this commitment from DHI, and in this second annual Communication on Progress, we describe the actions we are taking to continuously improve integration of the Global Compact and its principles into our business strategy, culture and daily operations.

It is important to note the call-for-action from the UN's newly adopted Sustainable Development Goals (SDGs) this year. Building on the Millennium Development Goals, they form a new sustainable development agenda. The technology and solutions from DHI can support the majority of the SDGs and we will increase our focus on supporting initiatives which can lead us even closer towards them.

Yours sincerely,

Jacob Høst-Madsen Chief Operating Officer

*We continuously strive to develop our global activities in order to support the UN Compact's ten principles.* 

#### INTRODUCTION

This Communication of Progress is our second annual report since we joined the United Nations Global Compact in 2013. During the last year, we have further aligned our strategies and activities with the ten principles of the Global Compact and we are pleased to present our results and achievements.

We utilise the UN Global Compact as a:

- framework for conducting Corporate Social Responsibility (CSR) initiatives within DHI Group and to ensure that our business partners support the Compact's principles
- basis for communication with the world around us we want to convey our views on social responsibility and our work in this field
- platform for dialogue with our staff, our clients and our external business partners

The purpose of this report is to:

- explain our progress to the UN
- communicate our messages, challenges and achievements to our various stakeholders, with whom we are also in contact with in a variety of ways
- communicate our work in implementing the UN Global Compact to our employees as well others who have an interest in CSR and social responsibility

### CORPORATE SOCIAL RESPONSIBILITY (CSR)

At DHI, we contribute to CSR through three focus areas:

- Improving the environment
- Responsible business practice
- Sharing knowledge and technology

Our global activities support the majority of the UN's 17 Sustainable Development Goals (SDGs). In the coming period, we will increase our focus on supporting the SDGs through our global operations.

# IMPROVING THE ENVIRONMENT

Each of our **Signature Projects** has ushered in considerable environmental, social and economic benefits.

#### OUR ACTIVITIES IN 2014 AND 2015

Our projects described below provide concrete examples of how we have helped solve the world's toughest challenges in water environments. Each of these projects has ushered in considerable environmental, social and economic benefits in their respective areas.

To prevent introduction of invasive species via ballast water from the world's fleet, the United States Coast Guard (USCG) and International Maritime Organization (IMO) are requiring ballast water to be treated before discharge. DHI is approved by the USCG as an Independent Laboratory together with DNV-GL, and provides independent performance evaluation of ballast water management systems (BWMS) for the approval process. The purpose of the performance evaluation is to ensure that the BWMS are capable of meeting the ballast water discharge standard in land-based and shipboard evaluations and do not cause unacceptable harm to the vessel, crew, environment or public health.

In Denmark, Alfa Laval tested their BWMS at our DHI Ballast Water Test facility in 2014. Both land-based and shipboard testing was performed. During the testing of Alfa Laval BWMS, the testing, quality assurance (QA) and quality control (QC) procedures were consistent with the USCG requirements. The performance evaluation based on the results achieved in landbased and shipboard testing proved that Alfa Laval BWMS complied with the ballast water discharge standard. No USCG Type Approvals have yet been issued, but Alfa Laval is one of the first BWMS developers applying for the USCG Type Approval Certificate. In Northern India, we developed a Real-Time Decision Support System (RTDSS) for the Bhakra Beas Management Board (BBMB) – the entity in charge of managing droughts and floods in the North Indian States. BBMB also has the duty to ensure that people living in the North Indian States have enough water to meet their irrigation needs. Our RTDSS provided BBMB with the latest information available on the state of the water in its catchment and command area, allowing them to improve flood management, leading to minimised loss of life and property for those living along the rivers.

In the western Indian state of Rajasthan, we helped to improve the water supply and distribution system through hydraulic modelling in 222 towns. Rajasthan is known for its natural beauty and colourful history. However, 60% of the state's land is desert – the main cause of its acute water deficiency. In the context of water distribution, benchmarking is an effective tool to identify critical components of the water distribution system where interventions are required. Our study and its results provided an immediate solution to the challenges facing the demand-loaded water distribution network in Rajasthan, helping the state government in their objectives of equalising water pressure and enabling its equitable distribution network.



We helped companies like Statoil – that conduct oil and gas explorations – ensure that noise from their work does not harm marine mammals. Current noise risk assessment models assume that marine mammals are stationary. However, marine mammals move around their environment, which means traditional risk assessments can lead to unrealistic results. Using the Chukchi Sea as the demonstration area, we created a Dynamic Risk Assessment Model for Acoustic Disturbance (DRAMAD) to model the movements of marine mammals before, during and after noise exposure. DRAMAD provides far more accurate results and enables Statoil to convey environmental awareness to the local communities in the area.

In the Czech Republic, we helped in the sustainable management of Non-Revenue Water (NRW) in their overall water distribution network. Severočeské Water and Sewerage Company (SCVK a.s.) operates the largest regional water supply system and distribution network in nearly 400 settlements in the Czech Republic. However, many of the water distribution networks suffered from high leakage levels – to the tune of 20-40%. In close cooperation with SCVK a.s., we developed a method which catered to specific requirements within their NRW reduction strategy, the most important part of which was the implementation of our Leakage Monitor. The monitor has effectively helped to manage leakages in the water distribution networks and maintain them at stable and economically optimal levels. In the Lake Victoria Basin, East Africa, we helped develop a Water Resources Information System (WRIS) to enable stakeholders to access, share and evaluate available basin data. Several East African countries depend on Lake Victoria – the world's second largest freshwater body – for transportation, hydropower generation, food and water. Environmental changes in recent years have highlighted the need to coordinate various water resources and environmental initiatives in the basin. Our WRIS – being developed as part of the large-scale Lake Victoria Environmental Management Programme – enables easy and robust data exchange for improved management and planning with a national and regional perspective.

In Singapore, our coral modelling research project carried out in collaboration with Singapore National Parks Board won an R&D award in a national urban sustainability congress. The award was presented for innovation in using agent-based modelling (ABM) to determine ecological connectivity in the marine environment and to sustain marine biodiversity during coastal development. The ABM of coral larvae dispersal can be readily applied to various areas in the management of coastal and marine environments, particularly in relation to land reclamation, offshore construction and conservation planning. Our project findings have paved the way for new projects looking at seagrass connectivity as well as location optimisation for marine habitat enrichments for coral reefs in Singapore.



In Thailand, we protected millions of lives against devastating flooding by implementing our Decision Support System (DSS) for flood forecasting in the Chao Phraya River basin. During the 2011 monsoon season, severe floods ravaged Thailand. With hundreds dead and millions of dollars in economic losses, it was one of the worst floods to hit the country in decades. The Hydro and Agro Informatics Institute asked us to develop a flood forecasting and flood management DSS to improve Thailand's flood management in the future. Based on real-time information, the DSS will enable Thai authorities to make sound decisions and undertake preventive measures to alleviate the detrimental impacts of severe flooding. Furthermore, it will aid authorities in warning the public about imminent flooding, giving residents and businesses time to prepare and react in times of need.

#### Minimising emissions of greenhouse gases

DHI has a strong focus on reducing our emissions, including carbon dioxide  $(CO_2)$  and other greenhouse gases through our behaviour. During the last decade, we have worked diligently to reduce the emissions through specific projects, for example, in solar power and energy optimisation. In the summer of 2015, an energy audit of the activities at our Headquarters in Hørsholm, Denmark was conducted. The result led to the development of a wide range of new opportunities to reduce our heating and electricity consumption.

Through the use of The Climate Compass, we will quantify and visualise our emissions and reduction targets. The  $CO_2$  emissions are measured in metric tonnes and the reporting is based on scope 1, 2 and selected 3 sources.





The main emissions in our headquarters arise from the use of electricity and heating in office buildings as well as employee business flights, which accounts for more than 90% of the total emissions.

The Climate Compass was formed in cooperation between the Confederation of Danish Industries and the Danish Ministry of Business and Growth. To get more information on The Climate Compass, please see The Corporate Climate Portal here: www.climatecompass.dk

See all our projects here: www.dhigroup.com/references

#### OUR FOCUS IN 2016

In 2016, we will implement an environmental policy which sets out the framework for environmental management – with objectives and measurable targets to be achieved by all DHI offices worldwide.

We will also implement an environmental management system in accordance with ISO 14001.In addition, we will measure our worldwide  $CO_2$  emission caused by energy consumption and work-related transport and publish our CO<sub>2</sub> footprint calculated according to The Climate Compass.

We will also establish a method to estimate the reduction in  $CO_2$ emission if we choose video conferences over physical trips.

Furthermore, we will focus on purchasing EU Ecolabel and Nordic Ecolabel cleaning and paper products, electronic equipment, furniture as well as light sources.

## RESPONSIBLE BUSINESS PRACTICES

reaffirmed our commitment to ensuring responsible business practices throughout our organisation.

#### OUR ACTIVITIES IN 2014 AND 2015

In 2014 and 2015, we developed a new Code of Conduct ready to be launched. This new Code of Conduct will help ensure that all of our employees live up to our ethical standards for the environment and society on a daily basis. This includes offering the best technical choices from a long-term and local-global impact perspective.

This new Code of Conduct will be conveyed to all employees in Q4 2015. We will also make our responsible business practices policy a part of our New Employee Induction and our Project Manager training. This will further ensure our continued implementation of CSR best practices throughout our organisation. Furthermore, we have integrated a requirement to recognise and follow our Code of Conduct as a part of the qualification process when subcontracting. This process is ready to be launched in Q4 2015 and it will help improve the process of assessing CSR impacts during the subcontractor qualification phase and convey our CSR policies to our subcontractors.

In addition, we have extended our whistle blower policy to include reporting of violations of human rights and labour principles – anonymously if the person so chooses.

In 2014 and 2015, we have implemented our documented management system – the DHIBus in an additional 23 of our offices located in 17 countries. The system includes policies and procedures related to CSR.



#### OUR FOCUS IN 2016

To further strengthen our commitment to engaging in responsible business practices, we will screen projects for violation of human rights and labour principles, damage to environment and corruption as a part of the risk analysis during the bidding decision process prior to entering into contracts and agreements. This will enhance our internal focus on CSR issues and inform our client of our CSR principles, helping to prevent and mitigate the risks of violating human rights and labour principles, damage to environment and corruption. In addition, we will make it easier for all to find our existing corporate whistle blower portal at our web portal, enabling easier access to the policy and report form.

We will continue to strive to exhibit CSR best practices and assess labour-related risks in our operations, with health and safety as focus areas to be prioritised. We will evaluate the risks and implement actions to ensure the health and safety of all our employees.

## SHARING KNOWLEDGE AND TECHNOLOGY

Around the world, we share **our knowledge** of water environments.

### OUR ACTIVITIES IN 2014 AND 2015

'Education is the most powerful weapon which you can use to change the world.' – Nelson Mandela

With this powerful message in mind, DHI has invested heavily in the young minds of the world, while also sharing our knowledge and technology globally in general. With several thousands attending our seminars and courses worldwide – more than 7,000 people in 2014 – we help increase the knowledge and skills of professionals within the field of water.

DHI has signed Memoranda of Understanding (MoUs) with universities and research organisations around the world to support educational activities. In DHI South Africa, we support local universities with internship opportunities for their students, providing mentorship and capacity-building every step of the way. In 2014 and 2015, we co-organised UNEP-DHI Eco challenges. The UNEP-DHI Eco challenge is an online serious gaming competition for high school students in Asia to educate the youth about the importance and interconnectivity of water, as well as how it can be better managed sustainably. What started out as a small competition in four countries involving about 100 students in 2013, has grown to include over 10 countries and more than 3500 students in Asia Pacific in 2015.

This year, our not-for-profit online serious game – Aqua Republica – was a tribute to Singapore's 50 years of independence. The 2015 Eco Challenge used a modified version of Aqua Republica to include scenarios reflective of Singapore's water problems, allowing the players to embark on their own 'Singapore's Water Journey'. The 2015 finals were held in conjunction with World Water Forum 2015.



We also collaborated with Singapore's Public Utilities Board (PUB) to run a mini 'Inter-generation' competition on World Water Day, where children, parents and grandparents participated in the game to improve their knowledge about water. Together with UNEP-DHI and Water Youth Network, we conducted a game session for young water professionals in the World Water Forum, where more than 50 participants enrolled to learn about the interconnectivity of water and land use.

In Germany, we sponsored the second German Water Partnership (GWP) Capacity Development Day 2014 and presented our concept of capacity development in the water sector in Jordan, one of the driest countries worldwide. Our support comprised of presentations, information material and financial contribution to the public event. In 2015, we contributed to one of the biggest trade fairs in Germany in the water sector, the Wasser Berlin International Congress. A highlight was the presentation and practical application of our online game Aqua Republica. Teams of international students were able to test their knowledge in the area of integrated water resources management in a virtual competition against one another. The four players that economised the restricted resources in the best possible ways received a prize. The students gained a valuable understanding of water systems and the integrated utilisation of such systems. Our German office sponsored this activity by preparing the case study and supporting the event with our human resources department, and providing hard- and software as well as other educational material. By continuing to share our knowledge, we will **help others** further enhance their knowledge of water environments.

Floods cause devastating disasters worldwide and can also lead to disease and contamination of water supplies. In Turkey, for example, major flood disasters occur every year, resulting in loss of lives and damage to properties. We helped Turkish water authorities adapt to the Water Framework Directive requirements by providing input to flood risk assessment activities. We conducted training courses on flood management for more than 100 experts in 2014 and 2015 where more than 10% of the participants were university students – it is our aim that they be encouraged to be actively involved in such activities. In Thailand, we arranged a flood seminar in collaboration with the Southern Natural Disaster Research Center at Prince of Songkla University, for executives from regional offices of government agencies in Thailand. One of the major water challenges in several Czech, Hungarian, Slovak and Bulgarian cities is the loss of water in water distribution systems. Losses are usually between 15-60% – a massive waste of potable water and energy. In light of climate change and drought threats, this high percentage of potable water loss indicates one of the most visible wastages of resources in Europe. To counter this problem, DHI has developed a unique technology for reducing the leakage of potable water from distribution systems. The system is implemented in utilities and leads to the reduction of water losses through online monitoring.



As seen in the SDGs, ensuring sustainable management of water is high on the world agenda. At DHI, this is also one of our priorities. In 2014 and 2015, we conducted three sessions of 3day integrated water resources management (IWRM) training courses in Vietnam and Myanmar. The courses focused on tools to implement IWRM – enabling environment and institutional roles as well as management instruments. During the courses, the participants had the opportunity to enhance their ability to undertake IWRM with a special focus on watershed and river basin catchment management, as well as on ecosystems and climate change aspects. The courses were arranged in collaboration with the UNEP-DHI Centre, which promotes IWRM at national, international and cross-national levels as well as support climate change resilience through considered water resources development, management and use.

#### OUR FOCUS IN 2016

In 2016, we aim to continue sharing our knowledge of water environments through capacity development programs, training courses and seminars around the world. Our collaboration with universities worldwide ensures a focus on the next generation in our activities, and we also target young people with our yearly UNEP-DHI Eco Challenges. The UNEP-DHI Eco Challenges enable students to learn about integrated water resources management in a fun and engaging way by through serious gaming.We will be co-organising the yearly UNEP-DHI Eco Challenges again in Asia – with the aim of increasing the outreach even further. In addition to this, we will be arranging a number of other challenges for students in other parts of the world.

Climate change and its impact on the world is significant. It is already affecting water resources and their management in various regions. It can have severe impact on urban areas, including increased flood risk, reduced water supply and displacements from coastal cities. Urgent action is needed as emphasised in the SDGs. As such, we will continue to focus on offering training courses and raise awareness on climate change mitigation and impact reduction.

We will also continue to offer freely accessible online courses and webcasts aimed at sharing knowledge and providing further insight into understanding and modelling the world of water. To us the message is clear: knowledge holds the key to unlocking the right solutions.

### COMMUNITY ENGAGEMENT

We aim to make a positive impact in the communities where we work by contributing our knowledge and resources to initiatives and charities.

Passionate DHI employees from our global offices dedicate their free time to engage in community-based activities or help people in need around the world through pro bono work, fundraising or by volunteering their knowledge and experience. For example:

In the Czech Republic, more than a dozen of our employees helped to collect waste from the River Sazava in April as part of the environmental initiative 'Cista Sazava'.

In our South African office, instead of providing corporate gifts and Christmas cards to clients, our colleagues are using the money to sponsor the studies of Aphiwe Nzimande through the iThemba Academy. They have been sponsoring Aphiwe for three years. The iThemba Academy offers fundamental early education to orphaned and vulnerable children from the broader Valley of 1000 Hills Community in Kwa-Zulu Natal. The independent school staffed by dedicated educators aims to ensure that the potential of each child is nurtured. Many DHI staff at our South African office has graduated from the University of Kwa-Natal, and as such, this area is close to our hearts. DHI also sponsors the mathematics prize at the school as we hope to encourage early engagement in the science and engineering fields.



Aphiwe Nzimande, whom DHI is sponsoring through the iThemba Academy.

Apart from the above, DHI South Africa also donated a set of chairs, desks, computers and electronic equipment to Zitikeni Secondary School in Thembisa to help improve its training room facility.

In Singapore, employees took part in a 50 km walk event organised by Raleigh Society to celebrate life and to raise funds for hospice care. They created an online donation platform to channel additional funds to hospice care and raised a total of SGD \$2,200.

In Denmark, 10 previously used DHI laptops are on their way to newly-arrived refugee families. This initiative will hopefully support them tremendously in their communication with loved ones at home, with the Danish authorities, and eventually in their efforts to get a job and integrate into Danish society.

# UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Our activities **support** the goals o end poverty, protect the planet, and ensure prosperity for all.

DHI's activities support the 17 newly adopted UN Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure prosperity for all. There are water related issues connected with all the 17 SDGs, and we will actively contribute to the fulfillment of the goals through our ongoing projects worldwide.



We have developed a company strategy, the DHI Compass, which clearly supports our CSR initiatives.

#### AMBITIONS

We have developed a company strategy, the DHI Compass, which clearly supports our CSR initiatives. We will continue to advance our progress within our three CSR focus areas: Improving the environment, responsible business practice, and sharing of knowledge and technology. Being a global company, we see a significant potential for contributing to sustainable development and social responsibility.

We will fully support the 17 newly adopted UN Sustainable Development Goals. All of the goals involve water related issues which are at the core of DHI's quest and activities.

#### DHI THE EXPERT IN WATER ENVIRONMENTS

DHI are the first people you should call when you have a tough challenge to solve in a water environment – be it a river, a reservoir, an ocean, a coastline, within a city or a factory.

Our knowledge of water environments is second-to-none. It represents 50 years of dedicated research and real-life experience from more than 140 countries. We strive to make this knowledge globally accessible to clients and partners by channelling it through our local teams and unique software.

Our world is water. So whether you need to save water, share it fairly, improve its quality, quantify its impact or manage its flow, we can help. Our knowledge, combined with our team's expertise and the power of our technology, holds the key to unlocking the right solution.



#### DHI OFFICES WORLDWIDE

Australia Austria Brunei Bulgaria Canada China Czech Republic

Denmark (head office) France Germany Hungary India Indonesia Italy Malaysia

New Zealand Norway Peru Poland Romania Singapore Slovak Republic South Africa

Spain Sweden Turkey United Arab Emirates United Kingdom USA Vietnam

Brazil

For more information visit: www.dhigroup.com