

A Public-Private Partnership Initiative to Champion Sustainability in Abu Dhabi

# **SUSTAINABILITY JOURNAL**

Issue 1, Quarter 1, 2013

His Highness Sheikh Khalifa bin Zayed Al Nahyan inaugurated the world's largest concentrated solar power plant; Masdar Shams 1

HE Razan Al Mubarak on sustainability leadership

Members share their sustainability stories

Sharing best practice and insights from the field of sustainability



## Call for Task Force Participation

In support of the ADSG Strategic Goal, raising awareness and understanding of sustainability management, practices and reporting, the ADSG will make increasingly effective use of current and emerging technology to enhance communication with internal and external audiences and to stimulate collaboration among its members

# This is a call for nominations to join the ADSG Communications Task Force.

If you are interested and have experience in any of the following; Communications; Media management; Web development, and Social media, please drop us an email on communication@adsg. ae or call us on 02 - 693644

In the initial phase of start up, we propose that the length of term for the Task Force to be one year with a possible extension should the task force need more time. The task force will accomplish its work primarily via a monthly meeting, emails and conference calls. Expected time commitments will be 8 hours a month.

### **Duties and Responsibilities**

The task force will deliver a final report with recommendations on which current communication practices should be maintained, and which new media or practices should be implemented. The task force shall:

- Review current ADSG communication channels and how they are used, including Twitter, Facebook & LinkedIn presence, website, email communications, press releases
- Conduct a mini benchmark study of similar organizations' communications and uses of communication technology, seeking out effective and realistic models that might be incorporated into ADSG plans
- Gather information from ADSG members that have a social media presence about the use and effectiveness of their communication tools.

## What are the key messages we need to send out?

Developing the ADSG communications strategy and plan 2013/14

To participate, please contact us by email no later than 10 May, 2013. With a view to holding the first meeting in the last week of May.

If you have any questions or concerns, please drop us an email on communication@adsg.ae or call us on 02 – 693644.



## A Word From the Editor

The first edition of the Abu Dhabi Sustainability eJournal marks an important milestone for the Abu Dhabi Sustainability Group as it showcases the group members' collaboration in knowledge sharing and demonstrates their continued commitment towards a sustainable future. The journal, as part of a larger communication strategy, in essence, highlights the value and importance of stakeholder partnerships on issues of sustainability, including technological advancements, environmental conservation and community outreach. Thank you for your valuable contributions,

Sandra Anani ADSG Communications Advisor

### **ADSG Communications Team** Telephone: +971 (0)2 - 6934644



Sandra Anani ADSG Communications Advisor Communication@adsq.ae



Rasha Sawabi Administrative Assistant Rasha.Sawaby@adsq.ae Al Mamoura Building A, Abu Dhabi United Arab Emirates

Special thanks to Environment Agency - Abu Dhabi for their support in designing and producing this journal



**ھـــىئـة الــىئــة**-أبـوظـبــ Environment Agency - ABU DHABI

The opinions and views expressed in the ADSG Sustainability eJournal do not necessarily reflect the ADSG's policy or position.

Special thanks to the members of ADSG for providing information, pictures and support in the production of this Journal.

Photography provided by: Masdar **TAQA Zayed Future Energy Prize** 

## **Contents**

### **ADSG Sustainability Journal** Quarter 1, 2013

- 05 Comment from ADSG Director 06 News Roundup 08 Sustainability and Transformational Leadership 10 Masdar Launches Shams 1 12 Capacity Building Journey CDP climate change reporting 14 17 ADSG Holds Forum
- Quarterly Meeting 19 Zayed Future Energy Prize Open for Submissions
- 20 TAQA and Center for Waste Management
- 21 Students Attend World Future **Energy Summit**
- Abu Dhabi Sustainability Group 22 Calendar 2013
- Point of View: Towards Sustainability 23 Culture
- ADSG Members 24



## Abu Phabi Sustainability Group Declaration

Abu Dhabi, 30th of June 2008 We, the undersigned, Abu Dhabi Sustainability Group founding members

Hereby declare our commitment to work together in adopting sustainability as the fundamental approach in developing and executing strategic policies and using integrated management of our economic, environmental and social performance for the purpose of realizing the vision of H. H. Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE, and the vision of Abu Dhabi Emirate to achieve sustainable development, build a cohesive society and an open economy capable of global competitiveness.

We commit ourselves to do everything in our power, with our partners in this group, through the introduction of sustainability management practices, to improve management methods and decision making, reduce risks, and encourage use of technological applications to support sustainable economic and social growth.

We also commit to publishing an annual report that explains our sustainability management approach and an evaluation of our environmental, economic and social performance. We pledge this in a spirit of cooperation and open dialogue to ensure the highest levels of transparency; and we commit to supporting national plans and strategies.



## Comment from ADSG Director



A warm welcome to the first edition of the Abu Dhabi Sustainability Group's journal. This is a platform that is designed for you to highlight your achievements, pose questions and maximise the benefits of ADSG membership and partnerships for effective communication and knowledge sharing on issues of sustainability. We look forward to sharing the most up-to-date developments, engaging discussions and learning from you in the coming months.

Huda Al Houqani, ADSG Director

هد الحقاد

### The ADSG in Context

Since the inception of the ADSG in 2008, and with collaboration, support and leadership of our members, the Group has worked towards promoting a holistic, integrated and long term view of sustainability covering the key elements of environment, society and economy.

With representatives from the most important sectors in the Emirate, our members form a significant part of Abu Dhabi's economic and social prosperity. Partnering with the ADSG has helped Abu Dhabi organisations to become focused on sustainability. If you haven't yet read the Sustainability in Practice study, I would encourage you to do so now.

## **Looking Forward**

Following a series of communications and meetings with members, you may be aware that the ADSG has undergone an organisational review, and has emerged with a stronger and more focused approach to developing sustainability awareness locally and regionally. In the coming months, and with your close collaboration, we will build on the progress we have achieved and look at how we can harness the power of our members to drive the sustainability agenda forward.

### We Are What We Believe

Islamic ethics and values align closely with the sustainability ethos, an aspect that is worth reflecting on in terms of going back to basics and embracing sustainability as a way of life and part of our beliefs and core values.

The concept of khilafa, referring to the role of humankind as the custodian of creation, highlights humanity's role and duty to safeguard resources on Earth. I draw on verses from the Holy Quran and hadiths (sayings of the Prophet pbuh) which highlight principles and guidelines on sustainability, urging all to use all God-given natural resources carefully and respecting all God's creation. Let us pause, reflect and live by our values and beliefs.

### **Listening to You**

We continue to develop and promote all aspects of sustainability, starting with our 2013 plan with a survey. If you haven't already responded, I would very much welcome your participation. We need to hear from you to improve how we support your sustainable development. After all, sustainability is all about efficiency and supporting you to evolve and develop into sustainable future-proof organisations.

## News Roundup



H.E. Dr Jaber Al Jaberi launches the ADSG's 2013 Q1 Forum Quarterly Meeting

### The Zayed Future Energy Prize will be accepting submissions for 2014. The deadline is August 5,2013

The Zayed Future Energy Prize, the world's preeminent award for innovation in renewable energy and sustainability, opened for submissions on March 4, 2013 for the 2014 awards. Entries are invited in the categories of large corporation, small and medium enterprise (SME), nongovernmental organisation (NGO), the individual lifetime achievement and global high schools. The closing date for submissions is August 5, 2013. Click here for more details.

### Leading on Sustainability in the UAE, the ADSG Holds First Forum Quarterly Meeting for Members in 2013

The Abu Dhabi Sustainability Group held the first Quarterly Forum Meeting of 2013 on the 3rd April. The Forum Quarterly Meeting, with attendance of representatives from the group's over 40 member organisations, covered a review of the group's progress to date, an overview of the new structure with emphasis on the strategic plans for the group going forward with feedback from member organisations.

### Masdar Recognised for Sustainable Supply Chain Management

Masdar, Abu Dhabi's renewable energy company, won the coveted award for "Outstanding Performance in Sustainable Supply Chains"

at the International Institute for Advanced Purchasing & Supply (IIAPS) Excellence in Category Management & Strategic Sourcing Awards for the Europe, Middle East and Africa (EMEA) region, on April 6, 2013. Masdar was awarded for its commitment to the management of ethical or sustainable supply chains to provide improvements in strategic sourcing processes to positively impact society or the environment.



Masdar was also selected from all of the specific category award winners to take home the Premier Award for Outstanding Supply Chain Performance in the EMEA, which is awarded to the organisation showing the most significant improvement in process management and value for money performance in any category of spend.

### ADCED Delegation Visit Sick Children and Elderly at Sheikh Khalifa **Medical City**

In line with its belief in the importance of corporate responsibility and its commitment to communicate directly and continuously with the local community from all segments, a

delegation from Abu Dhabi Council for Economic Development (ADCED) visited in-patient children and elderly at Sheikh Khalifa Medical City (SKMC) in Abu Dhabi.

During the visit, the ADCED delegation was shown the state of the art medical facilities, visited various departmentsandgotaninsightabouttheprogressive medical care and treatment provided at SKMC. Click here for more details.

### **EMAL EHS Reps Almost Double**

Emirates Aluminium (EMAL) further heightened its commitment to workplace safety for employees with an expanded 'EHS Representatives Programme: Developing EHS leaders on the shop floor' for 2013. First launched in 2010 and now in its fourth year, employees receive training based on global best practice to make them accountable for shop floor safety and creating an evolving culture of continuous improvement for EMAL Environment, Health and Safety (EHS) performance. Click here for more details.

## **Urban Planning Council Unveils** Estidama School Programme

The Abu Dhabi Urban Planning Council (UPC) and Aldar Academies are joining forces to educate the next generation on sustainability issues that are relevant to their daily lifestyles. As stated by H.E Falah Al Ahbabi, General Manager, UPC: «Through Abu Dhabi Sustainability Week, our Leadership is asserting Abu Dhabi>s contribution to the global debate on sustainability. Click here for more details.

### **Absher initiative sees success** at Etihad Airways

Etihad Airways has welcomed more than 260 Emirati nationals to its workforce through the Absher initiative, since its launch in June 2012.

The Absher initiative was conceived by the President of the United Arab Emirates (UAE), His Highness Sheikh Khalifa bin Zayed Al Nahyan, to support Emiratisation and create new jobs for skilled Emiratis in the UAE labour market. global debate on sustainability. Click here for more details.

### NBAD participates in Earth Hour 2013

The National Bank of Abu Dhabi (NBAD), the Number One Bank in the UAE, will be joining millions globally on March 23, 2013 to observe Earth Hour, the world's largest campaign for

the environment, for the fourth consecutive year. Click here for more details.

### Aldar communities take part in Earth **Hour 2013**

The event, which brought together residents from across all of Aldar>s residential communities commenced with a presentation sustainability environmental and footprint reduction by a representative of Abu Dhabi Electricity and Water Authority. Click here for more details.

### TAQA Invites Companies to Qualify for **UAE's First Waste-to-Energy Plant**

The waste-to-energy power plant will receive approximately 1,000,000 tonnes of municipal solid waste a year and convert it into 100 megawatts of alternative power, enough energy to power more than 20,000 households in Abu Dhabi. The plant is expected to begin operations in 2016/17. Click here for more details.

### ZHO receives 200 laptop computers from Musanada as donation

The Zayed Higher Organisation for Humanitarian Care and Special Needs (ZHO) was donated 200 high-spec laptop computers by the Abu Dhabi General Services (Musanada), who is commitment to support the Abu Dhabi Government and its initiatives.

ZHO will distribute these laptop-computers to a number of its care centres and affiliates across Abu Dhabi, and have arranged to give 30 laptops to each of the following centres; Abu Dhabi Centre for Care and Rehabilitation, Abu Dhabi Centre for Autism, Zayed Foundation for Care, and Al Ain Centre for Care and Rehabilitation, as well as 20 laptops to Al Ain Centre for Primary Services, Click here for more details.

### **Groundwater Specialists Come** Together on World Water Day to Discuss Challenge

EAD, in collaboration with the Emirates Center for Strategic Studies and Research, organised a panel discussion to commemorate World Water Day.

The purpose of the panel discussion was to raise awareness about groundwater as a national strategic resource that should be managed and protected for future generations. Click here for more details.

## Sustainability and Transformational Leadership



H.E. Razan Al Mubarak, Secretary General, Environment Agency - Abu Dhabi

### Role of Sustainability

Since its inception in 2008, the core of the Abu Dhabi Sustainability Group (ADSG) has been environmental conservation and local community development by helping to map the overarching vision for sustainable growth in partnership with public and private entities. It is important to highlight that sustainability is not just a word, it is a concept that we must collectively understand, internalise, adopt and live by to survive.

Collaboration, consultation and developing a shared vision are pillars to achieving the strategic goals of the ADSG. Furthermore, collaboration and partnership is equally critical in achieving UAE Vision 2021, the Abu Dhabi Environment Vision 2030 and the agenda of the Abu Dhabi Government.

We are evolving the concept of sustainability to become an umbrella for all our projects and activities moving forward. Embracing sustainable living principles is critical, and the role that the Abu Dhabi Sustainability Group plays, in terms of raising awareness, capacity building and multistakeholder engagement, is vital.

Strategically, sustainability is as important as economic success to our organisations' future

success. We need to move away from short-term planning with selective, compartmentalised programmes and move towards working together and developing an holistic approach that delivers consistent, systemic change.

This requires a step-change from a traditional management approach into transformational leadership that aims to integrate sustainability into business-as-usual, and fosters innovation and creativity.

### The ADSG's strategic role

We recognise that knowledge sharing is important, however, we must also recognise that we need to go beyond solely sharing specific knowledge and teaching certain skills; what we also need to do is impart and embed knowledge in way that changes attitudes, behaviours and transforms peoples' and organisations' thinking, in other words to empower.

This is the crucial role that the ADSG plays; to support member organisations in mapping the journey towards a sustainable framework through the group's various programmes, activities and engagement sustainability training; helping member organisations to embed sustainability practices successfully into the strategy and operations of the organisation and start the transformation journey.

How we procure goods, consume them, manage our operations and manage the resulting waste is a significant aspect for sustainable growth and development that we are working towards with ADSG member organisation.

We are fortunate in that 42 organisations are already members of the group, and are well placed to take advantage of the programmes on offer. In fact, several member organisations are well on their way towards a more sustainable future, with leaders who are passionate about sustainable development and committed to supporting the delivery of the UAE Vision 2021.

Whilst the business case for sustainability may be different for each organisation, this indeed can be one of the most challenging parts when initiating or developing sustainable practices. successfully embed Organisations that sustainability in their daily business processes realise that the benefits and efficiencies gained through sustainable management practices are enormous.

In the initial stages, changing our way of thinking and linking business objectives to long-term strategies that align to the UAE Vision 2021 will reveal that a sustainable approach is the only viable one. Sustainability needs to be part of the DNA of an organisation, for its true potential to be realised.

To support the mission of the ADSG, we need to work more widely with our member organisations, supporting them with the critical task of conveying the importance of sustainable development, and indeed to encouraging nonmember organisations to get involved as well.

It is about putting matters into context so more people can easily understand the issues which sustainable development is seeking to tackle, to provide the support they may need so that their colleagues and organisational leadership are convinced of the value of sustainability, not just in ethical terms, but in concrete business terms as well.

Through the ADSG's outreach activities and engagements, we aim to provide a platform for harnessing the passion to make a difference, aligning to the strong vision of the UAE and encouraging an imaginative approach to make a tangible difference, bringing us all, as a collective, a step closer towards a sustainable future.

When public private organisations work together in partnership, the benefits and success of this collaboration is shared amongst all of us.

"We need to move away from short-term planning with selective, compartmentalised programmes and move towards working together"

## Masdar Launches Shams 1

### The World's Largest Concentrated Solar Power Plant in Operation



100-megawatt power plant is a major milestone for renewable energy in the Middle East

His Highness Sheikh Khalifa bin Zayed Al Nahyan President of the United Arab Emirates and Ruler of Abu Dhabi officially inaugurated Shams 1, the largest concentrated solar power plant (CSP) in operation in the world, on March 17, 2013. Located in the Western Region of Abu Dhabi, the 100-megawatt, grid connected power plant will generate clean energy to power 20,000 homes in the UAE.

"Expandingourleadershipintorenewable sources of power demonstrates the United Arab Emirates' commitment to maintaining its position as a major provider of energy"

- His Highness Sheikh Khalifa bin Zayed Al Nahyan

His Highness President Sheikh Khalifa bin Zayed Al Nahyan expressed his pride in the inauguration of Shams 1, calling it a major achievement in the UAE's goal of energy and economic diversification.

"Expanding our leadership into renewable sources of power demonstrates the United Arab Emirates' commitment to maintaining its position as a major provider of energy," said His Highness Sheikh Khalifa bin Zayed Al Nahyan. "The inauguration of Shams1 is a major milestone in our country's economic diversification and a step toward long-term energy security."

"We are proud of the young Emiratis that worked on this project," said His Highness. "The expertise they gained, working closely with international companies and building a project of such scale, is the type of human capital development that will enable our country to secure long-term energy leadership."

"Shams 1 is a strategic investment in our country's economic, social and environmental prosperity," added His Highness. "The domestic production of renewable energy extends the life of our country's valuable hydrocarbon resources and supports the growth of a promising new industry."

The ceremony was also attended by His Highness Sheikh Mohammed bin Rashed Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai; His Highness General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, as well as other members of the UAE leadership.

Holding nearly half of the world's renewable energy potential, the Middle East and North Africa is poised for unprecedented growth in renewable energy. "The inauguration of Shams 1 is a breakthrough for renewable energy development



in the Middle East," said His Excellency Dr. Sultan Ahmed Al Jaber, CEO of Masdar. "With the demand for energy rising exponentially, the region is undergoing a major transformation in how it generates electricity. In fact, the Middle East is poised for major investments in renewables, and Shams 1 proves the economic and environmental advantage of deploying largescale solar projects."

"Our wise leadership recognises the immediate and future benefits of renewable energy," added Dr. Al Jaber. "Investments in sophisticated projects like Shams 1 train our future energy leaders, create specialised jobs and encourage economic development. Renewable energy is fundamental to achieving a diversified energy mix and extending the life of our precious hydrocarbon resources."

Clean energy, is aligned with the legacy of conservation instilled in us by our founding father, Sheikh Zayed bin Sultan Al Nahyan."

Shams 1 was designed and developed by Shams Power Company, a joint venture between Masdar (60 percent), Total (20 percent) and Abengoa Solar (20 percent).

### "We are proud of the young Emiratis that worked on this project"

- His Highness Sheikh Khalifa bin Zayed Al Nahyan

With the addition of Shams 1, Masdar's renewable energy portfolio accounts for almost 68 percent of the Gulf's renewable energy capacity and close to 10 percent of the world's installed CSP capacity.

"Abu Dhabi is investing and incubating a new energy industry," added Dr. Al Jaber. "Through Masdar, we are redefining the role our country will play in delivering energy to the world. From precious hydrocarbon exports to commercially viable renewable energy projects, we are extending our legacy for future generations."

The innovative CSP project reduces the UAE's carbon emissions, displacing approximately 175,000 tonnes of CO<sub>2</sub> per year, an equivalent to planting 1.5 million trees, or taking 15,000 cars off the road.

With solar power generated during peak demand, the UAE can reduce its need for "peak shaving" generators, which are expensive and idle most of the year.

"As a long-lasting partner of Abu Dhabi, we are particularly proud to have been part of the challenging adventure that was Shams 1 construction. This is a major step in the process of transforming the capabilities of solar power in the region," said Christophe de Margerie, chairman and CEO of Total. "We share Abu Dhabi's vision that renewables have a promising future alongside fossil energies. Total is today a world leader in solar industry. As such, we are pleased to accompany the Emirate in the diversification of its energy mix."

Covering an area of 2.5 km<sup>2</sup> – or 285 football fields - Shams 1 incorporates the latest in parabolic trough technology and features morethan 258,000 mirrors mounted on 768 tracking parabolic trough collectors.

By concentrating heat from direct sunlight onto oilfilled pipes, Shams 1 produces steam, which drives a turbine and generates electricity. The project uses a booster heater to heat steam as it enters the turbine, dramatically boosting the cycle's efficiency. Shams 1 also features a dry-cooling system that significantly reduces water consumption – a critical advantage in the arid desert.

"The Middle East holds nearly half of the world's renewable energy potential," said Santiago Seage, CEO of Abengoa Solar. "The abundance of solar energy is an opportunity to integrate sustainable, clean sources of power that address energy security and climate change. The region needs more projects like Shams 1, and we look forward to pushing the boundaries of future energy."

A source of great pride, the Western Region of Abu Dhabi is the centre of the country's hydrocarbon industry and represents the roots of its Bedouin heritage. With the addition of Shams 1, the region is evolving. Alongside oil fields, renewable energy and peaceful nuclear power is being developed to support the country's long-term energy requirements.

www.masdar.ae

## Capacity Building Journey

## Developing the internal capacity of our Members, through a carefully developed programme



Training participants during plenary and workshops

The Abu Dhabi Sustainability Group (ADSG) launched a capacity building programme called "Taking Responsibility for a Sustainable Future" during 2012. The Programme was developed by a team of international experts, led by Emmanuel Perakis from Stream, which in close co-operation with ADSG, designed a multi-fold programme, including a Guidance Handbook, an Assessment Tool, a series of Training Courses and a Support Program.

The Programme's objective is to assist ADSG Members in developing their in-house, long-term capacity, to both manage sustainability issues, as well as report on them, rather than outsource these activities. This is achieved by providing the required knowledge, tools and one-to-one coaching.

This article presents activities undertaken and results achieved during the 2012 Program, as well as a brief overview of the 2013 Programme, which has already started with active participation from ADSG member organisations.

## The 2012 ADSG Capacity Building **Programme**

The 2012 Capacity building programme launched with a tailored approach to meet the needs of the ADSG's member organisations. The package included:

Guidance Handbook: This customised, stepby-step guide helped organisations understand how to manage sustainability from a change perspective and what practical steps they could

take to improve. The Handbook was distributed to over 50 individuals, which participated in the 4 training courses conducted.

**Assessment Tool:** This on-line Sustainability Assessment Tool, was made available to 25 organisations, participating in the training courses, in order to quantify their current sustainability maturity level in 7 Areas (Management, Owners, Employees, Suppliers, Community, Customers, Environment), 40 sub-Areas and 4 Dimensions (Policies, Approaches, Performance, Perception), in order to plan and prioritise next activities.

**Training Courses:** 54 professionals from 25 organisations (both private and governmental) participated in the 4 ADSG Training Courses conducted within 2012, addressing Sustainability Management and Sustainability were conducted at the NBAD Academy, which thankfully supported delivery of all courses probono. Participants in these 4 day training courses, invested in total 1,980 man-hours to be trained, participated in 32 team workshops and were exposed to both local and international speakers from leading organisations (such as NBAD, Vodafone Group).

The average satisfaction of participants reached an impressive 8.4 out of 10, below is some of the feedback gathered from the attendees:

"Hands down, this was most valuable training course I have attended in the UAE. Excellent!" Joseph Gasik - Strategy Manager - Musanada

"An excellent use of time. Informative, practical and balanced." Michelle Homes-Sustainability Manager-National Bank of Abu Dhabi

"Mr. Emmanuel has taken us to a journey of real life examples, highlighting the essence of Sustainability. I highly recommend attending this course." Nasser Al Shamsi – Performance Management Specialist - Department of Economic Development

"Thanks to ADSG, Environmental Agency and NBAD for providing this opportunity." Muhammad Ihsanullah - Director of Environment, Health & Safety - Rotana Hotel Management

"It has been one of the best training courses that I attended. Although I came with very little information on the topic, I am leaving with very big charge and confidence that I can add value with in my organisation." Basima Al Mesbahi -Senior Analyst, Research & Advocacy - Emirates Foundation

"Emmanuel Perakis is a real authority on sustainability and transfers knowledge with enthusiasm and passion." Kelwyn Davies -Environmental Sustainability Manager - ALDAR **Properties** 

"Many training sessions have shiny Big Titles, but this course meant what it wanted to deliver: Sustainability Management, Reporting and a Road map to achieve it."Fatema Al Saba - Manager, Strategic Projects - National Bank of Abu Dhabi

"Thank you, great course, I learned a lot about sustainability."Dr Rachad Baroudi-Planning & Performance Management - ADPC

**Support Programme:** An annual Support Programme, comprising of four one-day quarterly workshops and four one-day 1-to-1 support meetings, was delivered to 10 organisations, in order to coach them on issuing their Sustainability Report. Eight of these organisations managed to reach the finish line of this marathon and are in due course to deliver their 2012 Sustainability Report, developed in-house. The participating organisations included The Abu Dhabi Department of Municipal Affairs, The Emirates Foundation, TAQA, ADNEC, Musanada, Rotana and The Western Region Development Council.

average satisfaction of programme participants reached an impressive 8.6 out of 10, with indicative quotes included below:

"I thought writing a Sustainability Report is like building a Rocket, but after the coaching I feel motivated to write the Sustainability Report.' Kalfan AlMarar - Chairman of Sustainability Development, Al Ain City Municipality

"I consider myself a lucky person to have attended the programme. I have learned a lot. Thanks." Jamila Khanji – Advisor

"Highly informative and value added course that helped our entity immensely." Sriram Veeraraghavan – Manager, Internal Audit, WRDC

"The flexibility of 1-to-1 meetings and focus was very appreciated." Stephen John - Head of Sustainable Development, TAQA

"This is a mindset changing programme." Fatima Al Ali – Category Manager, Musanada

#### The 2013 ADSG Capacity Building Programme

After the successful first Capacity Building Programme, ADSG has already launched the new, extended 2013

Capacity Building Programme, which includes:			
Activity	Dates		
Two four-day ADSG certified Training Courses, which will help you learn how to manage sustainability in a structured way, as well as how to develop a sustainability report.	14-17 April 2013 16-19 September 2013		
Two one-day Awareness Training Courses, especially designed to provide Senior Directors with the required knowledge to guide their organisations on sustainability issues.	12 June 2013 24 September 2013		
Four one-day Theme Workshops, to brief you on four emerging sustainability issues and facilitate knowledge sharing. Sustainability Planning & Roadmap:	18 April 2013		
Responsible Marketing & Communication:	17 November 2013		
Responsible Supply Chain & Procurement:	19 November 2013		
Energy Management & Forecasting:	26 January 2014		
The annual Support Programme, comprising of four one-day quarterly workshops and four one-day 1-to-1 support meetings, which will coach you on issuing your organisation's Sustainability Report .	09 June 2013 15 September 2013 18 November 2013 06 April 2014		

## Zayed Future Energy Prize winner, CDP, makes benefits of climate change reporting available to Abu Dhabi organizations



CDPs Executive Chairman Paul Dickinson receives the Zayed Future Energy Prize from H.H. General Sheikh Mohammed Bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces)

In 2012 CDP, an independent non-profit organization, was awarded the prestigious Zayed Future Energy Prize, in recognition of its work to catalyze the transition to a profitable low carbon economy, reduce greenhouse gas emissions and promote sustainable water and energy use. This great honor has brought substantial benefits to CDP, including forming links with Abu Dhabi, the home of The Prize.

To transform the economic system to prevent dangerous climate change and protect our natural resources, CDP works with companies, investors and governments to realise the business benefits of environmental action. It is the only global mechanism for companies and cities to report carbon emissions, energy-use, climate

change strategies and other environmental issues. Holding the largest collection of primary corporate environmental data, CDP puts this unique information at the heart of business, investment and policy decision-making to drive sustainable actions and strategies to mitigate climate change and overcome resource scarcity challenges.

On winning the prize, CDP's Executive Chairman Paul Dickinson said, "CDP was delighted to win the top accolade in the Zayed Future Energy Prize's NGO category. We have been working hard for over a decade to create the win-win scenario of profitable, low carbon growth. Receiving the award was testament to our role in powering sustainable economic prosperity."

Since then, CDP has seized the opportunity to introduce the strategic and financial benefits of its reporting system to organisations in the United Arab Emirates (UAE). With the co-operation of Masdar in Abu Dhabi and PwC in Dubai, CDP held two awareness raising workshops in June 2012. This allowed CDP to connect with local stakeholders and better understand the region's needs.

The events demonstrated that UAE organisations have a keen interest in improving their knowledge of the business imperative for carbon and climate management.

The workshop attendees recognised that what gets measured gets managed; this is as true of carbon, energy and other natural resources as it is of any other aspect of business. CDP's unique global disclosure system enables companies and governments to see the business case for reducing environmental impacts.

Any Abu Dhabi Sustainability Group member who is interested in learning more or reporting to CDP is welcome to contact CDP's Global Operations Manager

It helps minimise risk and identify the cost savings and financial opportunities created by measuring, managing and reducing impacts on the environment and natural resources. In this way, CDP provides a valuable tool to support UAE business and government efforts to achieve sustainable economic development.

The good news is that the organisations in Abu Dhabi and the wider UAE can benefit from participating in CDP's climate change program. Participants in this program need to complete a questionnaire on three categories: management (governance, strategy, targets, communication), risks and opportunities (regulatory, physical, other) and emissions (types of emissions, actions to reduce them, how they have been measured, use of energy). While some find it difficult to answer all these questions at the first attempt,

working through them serves to highlight where knowledge is lacking and where there is room for improvement. In this way, CDP guides organisations to start the journey of measuring their energy use and climate change impacts.

Novo Nordisk, a major pharmaceutical firm says, "We would point to CDP as a very good way to get started with evaluating the impact of climate change for your company."

Indeed, the annual reporting process focuses attention on the most relevant areas and tracks progress, enabling efficient capacity building over time. Technology company Cisco says, «The annual CDP survey provided the impetus to begin measuring and reporting our greenhouse gas emissions. We next began leveraging our CDP reporting in our annual CSR report. As we improved our CDP reporting, we gained the confidence to commit to a GHG reduction goal through EPA Climate Leaders. This goal is now driving the initiatives to actually reduce our emissions.»

In 2012, over 4,100 companies around the globe reported to CDP, including 81% of the 500 largest listed corporations in the world.

CDP would be delighted for some Abu Dhabi organisations to be included in the total for 2013. Participation in CDP is free and does not require any special certification or training, although resources to assist companies are available from the CDP website.

Manager, Eva Murray eva.murray@cdp.net.



## Invitation



## Hiwar Session on UAE Vision 2021 & **Green Growth Strategy**

The Abu Dhabi Sustainability Group (ADSG) is delighted to announce the return of the popular Hiwar (Arabic for dialogue) sessions. As part of a series planned for 2013 that will focus on current economic, social and environmental issues and their implications for sustainability in Abu Dhabi, and the wider region, as highlighted by the practitioners from the government, business and not-for-profit community.

The Abu Dhabi Sustainability Group is pleased to invite you to attend a Hiwar session on

## "UAE Vision 2021 and the Green Growth Strategy"

#### Objectives of this Hiwar session

This Hiwar session will provide a platform for knowledge sharing and debating on the following key areas:

Develop a common understanding on high-level Government direction, strategies and policies.

Demonstrate the link between UAE Vision 2021 and the Green Growth Vision

Improve understanding of the challenges and opportunities that these trends towards a Green Economoy present for Abu Dhabi.

#### Agenda

Date: 13 May 2013

**Location:** to be confirmed. Invitations will be sent out nearer the date. Register your interest by emailing: communication@adsg.ae

2:00 p.m. Welcome, introduction of Hiwar session goals

UAE Vision 2021 and Green Growth Strategy, presentations by key speakers and debate 2:15 p.m.

3.15 p.m. Panel debate

3.45 p.m. Review of emerging ideas from the Hiwar session

3.55 p.m. Closing remarks 4.00 p.m. Networking



## Leading on Sustainability in the UAE, the ADSG Holds First Quarterly Members' Meeting



H.E. Dr Jaber Al Jaberi launches the ADSG's 2013 Q1 Forum Quarterly Meeting

The ADSG, a public, private partnership for the benefit of sustainable development, consults with members and adopts future strategies at the Quarterly meeting in Abu Dhabi

The Abu Dhabi Sustainability Group (ADSG) held its first Members' Meeting of 2013 on the 3rd April at the Al Mamoura building in Abu Dhabi. The meeting was attended by representatives from the group's 42 member organisations. They reviewed the group's progress to date and focused on the strategic plans going forward.

For 5 years, the ADSG's various events and activities have successfully provided a platform for debating leading edge thinking on sustainability and raising awareness on sustainability practices. This is in line with the group's mission: "To promote sustainability

The Forum Quarterly Meeting, which forms part of a series of regular meetings that take place to review of the performance of ADSG in achieving its goals, covered a review of ADSG performance and progress during the previous quarter, an update on ADSG organisational review and restructure in line with feedback from members and a review and endorsement of the ADSG strategic objectives' action plan for 2013.

Active member organisations' representatives were recognised at the event for their tireless work in promoting sustainability practices and significant contributions.

H.E Razan Khalifa Al Mubarak, Secretary General,

Environment Agency - Abu Dhabi (EAD) said: Sustainability is a strategic driver of long-term value for Abu Dhabi, essential to its continued success, and it is incorporated in Abu Dhabi Vision 2030, as well as UAE Vision 2021".

H.E Dr Jaber Al Jaberi, Deputy Secretary General, Environment Agency – Abu Dhabi (EAD), said during his opening note: "The group's achievements, crowned by this close partnership, are a cause for celebration and a source of pride for all members in Abu Dhabi, the UAE and within the region. Among the key achievements was the extensive capacity building with ADSG members".

He added "As the group's achievements and reputation grow in the future with your support, participation and endorsement, we look forward celebrating success stories, achieving milestones and proving the power of partnership in supporting the delivery of a sustainable future".

Speaking at the event, Huda Al Hougani, ADSG Director, said: "I am delighted to work with our member organisations to promote sustainability awareness and action. The group's achievements and performance to date is a credit to our member organisations and a true reflection of their commitment towards a sustainable future in the UAE and the region. This year, as we go from strength to strength, our focus is on reinforcing partnerships. stakeholder engagement and supporting core skills and capabilities development in order to realise the full potential of the group through a true partnership approach."

During the course of the meeting, updates from the ADSG's Flagship Programmes were shared, including:anupdatefromZuhaMousa,Chairperson for the Sustainable Procurement Flagship Programme, where she highlighted: "Becoming sustainable has wide-ranging incentives; being environmentally friendly, improve the image of your brand and create a competitive advantage. Implementing sustainable procurement will always have positive final outcomes for your businesses varies from cost reduction, more resource efficiency or attract more customers.

"Between 60 and 80 percent of a company's spend is on supply chain, therefore, Sustainable Procurement become an important part of purchaser and contractor processes and procedures. And to implement Sustainable Procurement, it is essential to obtain the company's top management commitment and support to being sustainable. Every business has its own objectives and strategies, and every business is capable to identify how and where to apply sustainable procurement. We, the Abu Dhabi Sustainable Procurement committee will be supportive and we are here to provide guidance and directions on the implementation of Sustainable Procurement" She said.

Dr. Jamila Khanji, spoke about the progress of the Sustainable Labour Practices Flagship Programme and said "This program is built on strategic partnerships between stockholders from government, public, private, and not-for-profit organisations, under the umbrella of Abu Dhabi Sustainability Group. The main partner is Tawteen.

"This unique program contributes to achieving a sustainable employment in line with the commitments of Abu Dhabi Government, which aims to: Maximise the employment of Emiratis in the non -state economy, whilst ensuring the development of a globally competitive 'knowledge based economy'. The approach of this program is to analyse the current studies, polices and gabs to put recommendations and solutions for the short, medium and long term" she added.



Member organisations' representatives during the meeting

## Feedback from Members

On the 3rd of April the ADSG held the first Forum Quarterly Meeting for the 2013, which was very well attended by members. The event was informative and allowed for information sharing. Your feedback is so important to help us improve, and we are delighted at the high level of feedback we received. Below are some highlights.

## Q1 How well did the forum meet the stated objectives?

A1:



## Q2:We asked you: How do you rate the material and content of the presentations?

A2:



## Q3 Has your understanding of ADSG and the initiatives being undertaken increased as a result of attending the meeting?

A3:



#### Q4: Overall value of this meeting?

**A4:** 



Here are some of your comments:

Make it more interactive and more knowledge sharing

A good networking opportunity

Members should present more

More future focus

It opened a platform for stakeholder engagement Send all material out prior to the meeting Very good and effective ice breaker

Only have one check- in list Always have contribution from Senior Management Zayed Future Energy Prize Open for Submissions Annual US\$4 million prize recognizes individuals, companies, organizations and schools making a significant impact in the fields of renewable energy and sustainability





The Zayed Future Energy Prize, the world's preeminent award for innovation in renewable energy and sustainability, opened for submissions on March 4, 2013 for the 2014 awards. Entries are invited in the categories of large corporation, small and medium enterprise (SME), nongovernmental organisation (NGO), the individual lifetime achievement and global high schools. The closing date for submissions is August 5, 2013.

In the large corporation, SME, NGO and global high schools categories, submissions can be made by each company, organisation or school. However, for the lifetime achievement category, individuals must be nominated by a third-party.

All categories will be able to submit or nominate for the Prize on the website: www.zayedfutureenergyprize.com

The Zayed Future Energy Prize is an annual US\$ 4 million award, which recognises individuals, companies and organisations that have made significant contributions in the fields of renewable energy and sustainability. High Schools, however, are asked to submit a proposal for funding consideration.

"Based on the legacy of sustainability left to us by our Founding Father, Sheikh Zayed bin Sultan Al Nahyan, the Zayed Future Energy Prize is fast creating that much needed ripple effect around the world," said Dr. Sultan Ahmed Al Jaber, Director General of the Zayed Future Energy Prize. "From China to Mexico and from Germany to Tanzania; over the past five years, the Prize has continued to award and reward the innovators of our time in the hope that the impact of the Prize will enable the world to address our collective future energy challenges."

Launched in 2008, the Prize has gained global recognition and built a strong reputation as the most influential award in the renewable energy and sustainability community.

Submissions and nominations have increased 300 percent over the past five years as recognition of the value of the Prize grows. The 2013 winners of the prize were selected after a careful evaluation of 579 submissions. The eight winners included Siemens (Large Corporation), d.light design (SME), Ceres (NGO), Dr. Jose Goldemberg (Lifetime Achievement), and four high schools representing various regions of the world (Global High Schools Prize).

"The Zayed Future Energy Prize invites the global community to join forces and strengthen its commitment to renewable energy and sustainability. Our previous winners have collectively reduced the plight of 140,000 displaced persons, provided hundreds of thousands of jobs and provided clean water and electricity to over 8 million people in villages and rural parts of Africa and Asia. We encourage companies, individuals and schools from across the world to join us in solving the energy challenge and participate by submitting their applications before August 5," continued Dr Al Jaber.

The winners of the Prize are chosen according to a stringent four-stage selection process, including a shortlisting by an independent research and analysis firm and evaluation by the Review committee and Selection committees respectively. In the fourth and final stage, the jury comprising heads of state, leading academics, energy experts and world renowned personalities with an interest in sustainability, discuss and select the winners and runners up in each award category. Evaluations and eliminations are made using a scoring matrix based on the Prize's four main criteria: impact, long-term vision, leadership and innovation.

Winners will be announced on January 20, 2014, at an award ceremony to be held in Abu Dhabi as part of the Abu Dhabi Sustainability Week.

## TAQA, Center for Waste Management to develop waste-to-energy demonstration facility





TAQA, the global energy company based in Abu Dhabi, and the Center for Waste Management -Abu Dhabi (CWM) have extended their partnership by signing a Collaboration Agreement to study and develop a waste-to-energy demonstration facility at Abu Dhabi's Dalma Island

TAQA and CWM will together develop a waste-toenergy facility that produces 1 to 2 megawatt of alternative energy. This will be enough to supply power to more than 200 households as well as providing a more efficient waste management solution. Waste from Dalma Island, which lies 32 kilometres offshore Abu Dhabi's Western Region, is currently shipped to the mainland and further transported by road to landfills in Abu Dhabi.

TAQA and CWM teams have started conceptual studies for different waste-to-energy technical schemes to ascertain the best form of energy recovery from Dalma Island's waste, which includes household and organic waste.

TAQA and CWM are also developing a large scale waste-to-energy plant in Abu Dhabi and in March started the qualification process for the engineering, procurement and construction (EPC). The plant will convert up to 1,000,000 tonnes of municipal solid waste a year into 100 megawatts of alternative power, enough energy to power more than 20,000 households in Abu Dhabi. The plant will be the first in the UAE and is expected to begin operations in 2016/17.

Please click here for more information.

## 5,000 Students Attend World Future Energy Summit and International Water Summit in Abu Dhabi



UAE students interact with world leaders and experts on clean technology, sustainability and water conservation

More than 5,000 school and university students from across the UAE experienced how world leaders are addressing the challenges of energy, climate change, sustainable development and water conservation during this year's World Future Energy Summit (WFES) and International Water Summit (IWS) in Abu Dhabi, on January 29, 2013. The students, representing more than 800 schools and universities from all seven emirates, were hosted by Masdar, Abu Dhabi's renewable energy company.

The students were welcomed by dozens of exhibitors throughout the event, including Total, Shell and Change Initiative. Japanese Pavilion also participated and showcased Japan's renewable energy initiatives through organisations such as the Japanese Business Alliance for Smart Energy Worldwide, Japan Oil, Gas and Metals National Corporation and the Japan Co-operation Centre for the Middle East.

"Developing our next generation of energy leaders through education and underscoring the importance of clean energy, water conservation and sustainable development is a key focus at Masdar," said Dr. Sultan Ahmed Al Jaber, CEO of Masdar.

"The UAE's leadership in renewable energy and sustainable development can only be maintained through initiatives that capture the imagination of our young people," added Al Jaber.

"We remain dedicated to maturing human capital and encouraging our future leaders to engage and pursue careers in emerging sectors."

On the Masdar stand, the young people were treated to briefing sessions, demonstrations and interactive presentations throughout. The sessions were full of informative dialogue and stimulated the minds of the students.

Safwan Ali, a 13-year-old student from Our Own English School in Abu Dhabi, said attending the two events increased his understanding of the energy challenges of the future, and encouraged him to be a more responsible user of environmental resources.

"The Masdar presentation was very inspiring," said Safwan Ali. "Too much electricity is being wasted in the big cities. For future generations, it's a problem. My future and others' futures are being threatened because of pollution. I admire Masdar's commitment to reversing all of this and their hard work to develop electricity from solar panels, wind turbines and many other things. It's saving fossil fuels and making a big difference to younger generations. I will be sure to make my contribution."

Aida Al Busaidy, responsible for Masdar's youth outreach programmes, said: "Our youth engagement gets bigger every year and we are delighted that so many of our young people have been exposed to the critical, global sustainability challenges Masdar and its partners strive to address.'

"Not only do the students gain enormous insight through their interaction with the business community, but the industry itself benefits equally," added Al Busaidy. "Both are vital if the future of clean technology is to remain bright."

This year, WFES and IWS formed part of Abu Dhabi Sustainability Week 2013 - a five-day initiative that also welcomed the third session of the International Renewable Energy Agency's General Assembly, the Zayed Future Energy Prize awards ceremony and the International Renewable Energy Conference.

For more information about Masdar, please visit: www.masdar.ae

## Calendar 2013

The ADSG convenes annually for the following four types of meetings:

- CEO/MD Leadership Group (annual)
- ADSG Forum (quarterly)
- General Secretariat (monthly)
- Abu Dhabi Sustainability Week (annual)

CALENDAR OF MEMBERS AND PUBLIC MEETINGS 2013				
Type of event	Event	Date	Comments	
Forum Quarterly Meeting	FQM 2013/01	03/04/2013	Held on the third working Wednesday of each quarter (wherever possible), from 08:30-03:00 p.m, Hosted by ADSG members. The venue will be announced at least one month before the meeting.	
Raising Awareness & Knowledge Sharing	Hiwar 2013/01	13/05/2013		
Forum Quarterly Meeting	FQM 2013/02	12/06/2013		
Forum Quarterly Meeting	FQM 2013/03	18/09/2013		
Raising Awareness & Knowledge Sharing	Hiwar 2013/02	Q2		
CEO/MD Leadership Group Meeting	CEO 2013	Q3		
Raising Awareness & Knowledge Sharing	Hiwar 2013/03	Q3		
Raising Awareness & Knowledge Sharing	Hiwar 2013/04	Q4		
Forum Quarterly Meeting	FQM 2013/04	18/12/2013		
Abu Dhabi Sustainability Week	ADSW 2014	January 2014		

CALENDAR OF TRAINING 2013					
Type of event	Event	Date	Comments		
Training Course	Training TC1	14-17/04/2013			
Theme Workshop	TW 1	18/04/2013			
Support Workshop	Support SW 1	09/06/2013			
Awareness Course	AC 1	12/09/2013			
Support Workshop	Support SW 2	15/09/2013	Held on the first week of the last month of each quarter. The time and venue will be announced in		
Training Course	Training TC 2	16-19/09/2013	December 2013.		
Awareness Course	AC 2	24/9/2013			
Theme Workshop	TW 2	17/11/2013			
Support Workshop	Support SW 3	18/11/2013			
Theme Workshop	TW 3	19/11/2013			
Theme Workshop	TW 4	26/01/2014			
Support Workshop	Support SW 4	06/04/2014			

## **Point of View**

## **Towards Sustainablity Culture**

Sustainability is one of the most debated topics in the world on multiple levels and cross generations. While some perceive sustainability from an economic perspective, others propose the need to view sustainability from a more inclusive and holistic perspective involving societal, economic and environmental aspects. Furthermore, many scholars in the recent years have argued that in order to overcome the challenges we face at the present time, and in our endeavour to safeguard and provide a better world for the upcoming generations; we need to foster a culture for sustainability and embed its essence into social and organisational practices.

#### So, how could a culture for sustainability be fostered?

Academic work in the field of sustainability organisational achieving that sustainability is possible, now more than ever before, through effective use of knowledge diffusion and leadership engagement. It is important to understand the dimensional effects for an holistic approach to social, economic and environmental sustainability. The idea is that contributions would then drive innovation and establish a shared common ground for everyone to join in and support achieving the desired sustainability vision. Therefore, the set of values and beliefs which define culture are not only shared but also put in practice where focus is not only on short term results but also on longerterm gains.

The term 'sustainability' will no longer be a "buzz word", but, the notion of 'sustainability will become a cultural norm that is part of <business as usual> for everyone in the organisation.

communications Expanding the sustainability, which is part of the strategic goals and objectives of the ADSG, within the group's action plan is a brilliant start to enabling such a cultural paradigm shift. Sustainability communication for instance will contribute to successful knowledge management and dissemination that can provide communications tools and materials which will motivate member organisations to develop and drive effective changes. Placing this change within the context of a <sustainability culture> will allow strategic alignment with organisations, visions, enabling a balanced approach on our journey towards a sustainable 2030.

## Author's Biography

Dr. Abdulla Alhammadi has gained his Bachelor of Science and Master of Business Administration from the United States and PhD in Strategy and Program Managements from France. He works as Program Manager for the Abu Dhabi Plan 2030 at the General Management Office in Al Ain City Municipality. His research put focus on fostering for sustainability culture through effective use of knowledge and leadership engagement within the context of achieving success for Abu Dhabi vision 2030.



## **Group Members**

### **All Members**





































































### **Welcome to New Members**



















## The ADSG Sustainability Journal

## We are delighted to launch this journal with you and for you.

The journal is a result of feedback and requests made by members over the last couple of years. It is only with your contribution and continued support that the journal can grow and add more value to all members and readers, we therefore would like to invite your active participation and input into the journal.

We would love to know what you thought of the first issue, did you like it? How can we improve it? please let us know your thoughts and views so we can get a better issue out to you next quarter.

We look forward to receiving your feedback on communication@adsg.ae, or please call us on 02 6934644.



**Coming Soon** 

# SUSTAINABILITY JOURNAL

ISSUE 2, QUARTER 2, 2013

# **NEXT ISSUE OUT JULY 21ST**

## FEATURE ARTICLES IN THE NEXT ISSUE:

UAE Vision 2021 and the Green Growth Strategy Interviews with member CEOs The results of the ADSG Survey Update from ADSG Flagship Programmes Showcasing Capacity Building and Sustainability Reporting

## **ADSG IN A NUTSHELL**

#### **NETWORKING**

A unique network of 42 leadership organisations in Abu Dhabi that brings public, private and nonprofit sectors together to address sustainability challenges through a new cross-cutting institutional platform for collaboration on policy instruments.

#### **HISTORY**

Set up by the Environment Agency - Abu Dhabi with the support of the Executive Council of the Emirate of Abu Dhabi

#### **TRANSPARENCY**

Promoted transparency by encouraging members to report on their sustainability performance resulting in 17 member organisations disclosing reports on their sustainability performance using international best practice.

#### **AWARENESS**

Raised sustainability awareness across Abu Dhabi through building capacity of its members.

#### **ACCOUNTABILITY AND RESPONSIBILITY**

ADSG members are increasingly integrating sustainability considerations into their planning and decision-making processes.

#### INTERNATIONAL RECOGNITION

Raised Abu Dhabi's international profile as #1 worldwide by having the highest number of government organisations reporting in accordance with the Global Reporting Initiative (GRI) guidelines.

