



focus

#114

Your gateway to International Standards



climate
chaos



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#114



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ISO focus

January-February 2016



Photo : Patrice Nin / Ville de Toulouse



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Cover photo

UN Photo/Logan Abassi

A father carries his daughter on his shoulders as they flee rising waters in search of shelter in Cité Soleil, Haiti.



Photo : Crédit Agricole



Photo : Mutua Madrileña



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STRATEGY for a new beginning



Dr. Zhang Xiaogang, the ISO President.

2016 is a pivotal moment for ISO as we embark on our new Strategy that defines our agenda for the next five years. This strategy creates a pathway that meets our long-term goals within the overall theme of “Great things happen when the world agrees”.

International Standards have become the Esperanto of 21st-century economies. Without them, people do not have access to products and services that fit their needs, technological progress does not translate into economic growth, and countries can no longer compete in an increasingly interconnected global society. From design and manufacturing to distribution and marketing, all aspects of an industry’s products and services are affected at some point by standardization, driving a tangible increase in productivity. Approximately 37.4 % of productivity growth in the UK can be attributed to standards, according to a 2015 report published/commissioned by the British Standards Institution (BSI), ISO member for the UK. This translates into roughly 28.4 % of annual GDP growth – equivalent

to 8.2 billion British pounds (GBP). Similar findings have also been observed in Germany and France. A soon-to-be-released study by AFNOR, ISO member for France, will demonstrate that companies involved in standardization activities benefit from better access to international markets and improved turnover growth.

The impact, over time, of this positive contribution to output growth is substantial. But it depreciates when standards are undervalued or underused by those who should be getting the most out of them. This is where the ISO Strategy 2016-2020 comes in. Approved at ISO’s General Assembly in Seoul, Republic of Korea, in September 2015, the Strategy pinpoints ISO’s major strategic directions. It serves as a guide for how ISO will deliver high-quality and relevant standards as

technological, economic, legal, environmental, social, and political factors continue to influence standards and their use. The Strategy also serves as the basis for the ISO Action Plan for Developing Countries 2016-2020, which addresses issues specific to ISO’s work with developing countries.

2016 will be a busy year. We will have to take actions to ensure that International Standards developed through ISO’s 162-member community are “used everywhere” by government, business and society.

Major developments are expected in diverse areas such as services, security, environment and health. More also needs to be done to stimulate high-tech or advanced technologies. Technologies are not static and standards can “shape” demand rather than merely respond to it.

Which brings us back to our members. Since becoming the ISO President, I have visited many ISO members, each of which is the national gateway to international standardization. On most visits, I had the opportunity to interact with their stakeholders, high governmental authorities and the media. This has strengthened my conviction that we are indeed making a positive contribution to globalization, and that expectations are high for us to continue to do so. Here, ISO members can play an important role in strengthening the input of their

stakeholders in ISO’s development process, including underrepresented groups, and engaging the best experts on a continually growing list of relevant subject areas that address global challenges. That is what the ISO Strategy is for. It is not an easy agenda, but it is one on which the future of our economies and societies depends.

In closing, may all those who, through their work and dedication, contribute to the development of ISO standards and publications be warmly thanked, once more, for their participation. Not only do they stand at the heart of the action, which is crucial in today’s fast-evolving world, but they take part in building a better and safer world.

The mission of ISO – of which each one of us is an essential part – is that of eliminating global barriers and prejudices, substituting for them a set of common standards, valid for everyone and that everyone can make voluntary use of, to grow and prosper. Let’s then face the new year reinforcing our participation in this mission, making the best possible use of our capabilities and of the new tools that are at our disposal.

With my most sincere wishes for a serene year 2016. May it be one of peace and prosperity to each and every member of the ISO family and to the readers of *ISOfocus*. ■



ISO calendar 2016



Photo : Sergio Fabio Brivio (Italy)



Photo : Jenny Mance (Australia)



Photo : Oskar Szajer (Poland)



Photo : Rafis Rahmat (Austria)



Photo : Solveig Faust (Germany)



Photo : Kee Lai Sien (Malaysia)

Photo contest!

For the second year running, ISO gave the limelight to the talented photographers of ISO member bodies to help create its annual calendar. The fun contest aimed to bring the ISO family closer together, but we also wanted to capture people's imagination as we highlighted the incredible diversity of ISO standards... from air quality measurements to the colour fastness of textiles.



Photo : Arngrimur Blöndahl (Iceland)



Photo : Line Kamhaug Hopmann (Norway)



Photo : Urszula Banaszkiewicz (Poland)



Photo : Tim Chu (Australia)



Photo : Maryna Dymowska (Poland)

The result was 35 stunning images submitted by photographers all around the world, from Sweden to Malaysia, and as far as Australia. The shortlisted photos were then put to the vote on Facebook so the public could decide on their favourite pics. It proved a great opportunity to engage our ISO followers around these inspirational images while promoting a different way of thinking about standards. Enjoy our new ISO calendar 2016 on www.iso.org/cal2016! ■



Photo : Fernando Kahn (Argentina)



Photo : Marek Wozniak (Poland)



Photo : Dorota Szmitgier-Pawelska (Poland)



Photo : Per Norstedt (Sweden)



Photo : Matteo Rossi (Italy)



Photo : Emilio Tremolada (Italy)



Photo : Hanne Gæle Mønsand (Norway)



Photo : Simone Pizzardi (Italy)



Photo : Jair Andrés Chitiva Urbina (Colombia)

Leading global collaboration in climate change standards

by Garry Lambert

ISO is collaborating globally to update and extend its climate change standards and help the world minimize and adapt to the effects of climate change.



There is now little doubt that climate change is happening. It is the major environmental challenge of the 21st century, and it affects us all. “ The scientific evidence for warming of the climate system is unequivocal, ” states the Intergovernmental Panel on Climate Change (IPCC). The group of 1300 independent scientific experts from around the world concludes that there is a more than 90 % probability that greenhouse gases (GHG) such as carbon dioxide, methane and nitrous oxide, produced by human (anthropogenic) activity, have caused much of the observed increase in Earth’s temperatures over the past 50 years.

Our world is getting hotter, and we can see the evidence in loss of sea ice, accelerated sea level rises, warming oceans, more intense heat waves, and an increase in extreme events such as wildfires, drought, tropical storms and floods. Why is this happening? In its Fourth Assessment Report, the IPCC states that most of the current global warming trend is human-induced – much of it from burning fossil fuels in power stations and in our cars – and is proceeding at a rate unprecedented in the past 1300 years.

Universal agreement

At its Annual Conference of Parties (COP21, see **Box on page 15**) held in Paris last December, the United Nations Framework Convention on Climate Change (UNFCCC) resolved to achieve, “ for the first time, in over 20 years of UN negotiations, a legally binding and universal agreement on climate from all nations of the world ”, with the aim of keeping global warming below 2 °C by the end of the century – an agreement seen as crucial by the scientific community who advise that warming above 2 °C is likely to lead to catastrophic and irreversible weather events. Since, as seems most likely, we humans are causing much of the increase in GHG emissions that are damaging our planet and threatening our futures, we must find urgent ways to reduce GHG emissions and mitigate the effects. GHG mitigation is the subject of an extraordinary global effort that transcends individual nations and governments. It is also the greatest test of international collaboration that requires standards and common practices for greatest effect.

“ Never a greater need for standards ”

ISO has a range of International Standards (see **infographic on page 14**) that provide essential tools to help organizations mitigate their impact on the environment, including the ISO 14064 family for measuring, reporting and verifying greenhouse gas emissions. Developed by ISO technical committee ISO/TC 207/SC 7 and first published in 2006, it has become widely used for guidance in GHG management.



In advance of the COP21 climate talks that took place in Paris in December 2015, 300 school children gathered in a human formation on the Place du Capitole in Toulouse, France, to spell out “ 2 °C ”, in reference to the threshold for global warming advocated by climate experts.

Photo : Patrice Nin / Ville de Toulouse

We must find urgent ways to reduce GHG emissions and mitigate the effects.

Today, approximately 40 000¹⁾ entities around the world quantify and report GHG emissions or removals (i.e. carbon sequestration) to comply with government regulations, participate in emissions trading markets or to demonstrate leadership in corporate social responsibility. They achieve GHG emissions reductions in a number of ways, including technologies and policies for energy efficiency, low-carbon energy, renewable energy and green buildings, for example.

But standards must move with the times, so ISO is revising its core GHG standards in an extensive review process that will affect the future of carbon management globally. “ As the international approach to climate solutions becomes more driven by ‘bottom-up’ climate actions such as INDCs²⁾ – intended nationally determined contributions – there’s never been a greater need for a robust, cost-effective and credible international standards system to support GHG measurement, reporting and verification, ” says Tom Baumann, Chair of ISO/TC 207/SC 7, and Director of Knowledge Management at the Greenhouse Gas Management Institute (GHGMI).

1) Strategic plan of ISO/TC 207/SC 7.

2) In the lead up to the 2015 United Nations Climate Change Conference, countries were asked to publicly declare what actions they intend to take (INDCs) under a new global agreement, through which they put forward their pledges in the context of their own national circumstances, capabilities and priorities, within the ambition to reduce global greenhouse gas emissions sufficiently to keep global temperature rise to 2 °C.

ISO/TC 207/SC 7 comprises 57 participating countries, 18 observer countries and 18 liaison organizations, including the UNFCCC, CDP (formerly Carbon Disclosure Project), the World Resources Institute (WRI) in conjunction with the World Business Council for Sustainable Development (WBCSD), and The Gold Standard.

Baumann led development of an extensive strategic plan for ISO/TC 207/SC 7 as a roadmap for coordinated standards development on mitigation and adaptation. Stakeholders clearly indicated strong interest in participating in the efforts to develop a better global standards system for climate actions. “ Recognizing the demand to develop climate standards with global scale and speed to market, ISO members are using innovative tools and collaboration strategies to engage stakeholders at local and global levels,” he adds. “ It’s time for the next-generation standards collaboration ” was the theme of an official UNFCCC side event to COP21, led by Baumann and the Climate Change Coordinating Committee (CCCC) for ISO and GHGMI, with the aim of learning from past standards-setting activities

to align future action. The meeting concluded that the development of new climate standards would need to address important new areas of climate neutrality and resilience, and resolved to build alignment and collaboration between standards-setting bodies to fill climate-related standards gaps.

Blueprint for the future

The path forward is the work of the CCCC, set up by ISO in 2013 to blueprint the future roadmap to ISO standards for climate change mitigation and adaptation – not only to help the world reduce the effects of GHG emissions, but also to help us adapt to the effects of global warming.

Tod Delaney, Chair of the CCCC, says the committee recognizes that the magnitude of the global impact of climate change is only just beginning to be understood, and since great uncertainty surrounds the extent of these impacts, there is a need for ISO to have a structure in place that can meet current and future climate change challenges.

“ We have recommended ongoing process changes as well as standards development. This includes our recommendation to set up a permanent CCCC-like committee to ensure evolving climate change challenges are addressed appropriately in standards development, and also that this committee is recognized for all ISO’s work on standards with climate change components so that all such standards can be harmonized. Both issues are expected to become more and more critical as the climate warms,” he says.

The CCCC presented its final report of findings and recommendations to the ISO Council on 31 December 2015. In summary, Michael Leering, ISO/TMB/CCCC Secretary and Program Manager of Environment and Climate Change at CSA Group, said, “ our goal is to make ISO standards relevant and directly applicable to global climate change issues and INDCs so they can support the reduction of anthropogenic emissions, and the application of best practices. We have worked over the past two years to address the mandate given to us by the ISO/TMB to review the existing state of the art in ISO climate change standards, and assess stakeholder needs ”.

Global collaboration and coordination

The new data has helped clarify what is needed from ISO standards going forward. Leering explains : “ Our work has resulted in several key recommendations regarding how ISO could address climate change by filling gaps, and by identifying and implementing collaboration with the key international organizations on climate change to increase the acceptance of ISO GHG standards globally. ”

UNFCCC’s support, and its work with the CCCC on the scope of the recent COP21 meeting in Paris, was an early example of this collaboration. The committee will also coordinate closely with the European Committee for Standardization (CEN), the World Bank, CDP, WRI and WBCSD, and The Gold Standard.

Highest priority

ISO/TC 207/SC 7 has embarked on a strategic planning process to focus resources on areas of highest priority for GHG standardization. More GHG standards are planned to meet market and stakeholder needs, prompted by the CCCC review, including a new initiative on climate change adaptation standards.



Approximately
40 000* entities
around the world
quantify and report
GHG emissions
or removals.

* Source: Strategic plan of ISO/TC 207/SC 7.





A girl rescues her dog after unusually heavy rains, combined with high sea tides, trigger severe flooding across many of Thailand's provinces during the 2011 monsoon.

ISO's core GHG standards are also being revised to add greater value and make them fit for the future, with a heightened focus on higher-quality GHG measurement, reporting and verification activities at many levels. And as low-carbon development planning becomes more important, new GHG methodologies will be needed to assess low-carbon policies and associated programmes and technologies, particularly for developing countries seeking support for low-emission development strategies and the capacity to implement ISO GHG standards.

Also key will be sector-specific standards for adaptation implementation guidance to support the substantial resources required to make social and economic systems resilient to climate change impacts. The top priority sectors are food and agriculture, and the water, energy and transportation infrastructures.

A safe climate

These initiatives are part of ISO/TC 207/SC 7's strategic plan to develop standards to manage and mitigate GHG emissions, as well as to adapt to the effects of climate change and support sustainability. It states : " The primary purpose of ISO/TC 207/SC 7 is to develop standards to harmonize the practice of, and reduce the cost of, GHG mitigation and adaptation to the effects of climate change." Ultimately, ISO GHG standards are expected to be one of the solutions to achieving the overarching benefit of a safe climate.

However, to have any sort of beneficial impact, it is vital that ISO's GHG standards are successfully implemented worldwide. The point was dramatically expressed at the Delhi meeting of ISO/TC 207/SC 7 last September : " Mitigation and adaptation are inextricably linked because, simply stated, a failure to aggressively pursue mitigation through GHG reductions will inevitably translate to the need for a greater degree of adaptation to climate change impacts." Importantly, SC 7 now has a new work item proposal (NWIP) ballot open for a " high-level framework standard on adaptation ".

Guidance on climate actions

ISO/TC 207/SC 7 is also developing an important new guidance standard – ISO 14080 – which, says Chikako Makino, GHG Programme Manager at the Japan Accreditation Board, Co-Convenor of ISO 14080 and Member of the CCCC, will provide those involved in climate action with a framework for consistent,

comparable and improved methodologies to guide effective mitigation and adaptation activities, and also improve access to, and availability of, climate finance and other resources.

Massamba Thiouye of the UNFCCC Secretariat, who has been closely involved in the development of ISO 14080, says the development by several standards-setting bodies of methodologies without harmonization can result in a fragmented, complex and uncoordinated landscape of standards, programmes and guidance documents. In his opinion, ISO 14080, if aligned with UNFCCC standards, could play a pivotal role as a process standard, in bringing consistency across future methodologies regardless of which organization develops them.

Hari Gadde, Carbon Finance Specialist, World Bank, and observer to ISO/TC 207/SC 7, sees potential compatibilities between ISO's strategic plan for climate change standards, ISO 14080, and some of the World Bank's climate activities, particularly those targeting bottom-up climate efforts such as the Networked Carbon Markets Initiative.

" In my view, there is a huge need for development of standards like these to facilitate ' comparability ' of methodological approaches that different stakeholders use for quantification of emissions reductions. ISO 14080, if well developed by taking the evolving climate change architecture post-2020 into consideration, will have an enormous potential and will lay the foundation for establishing similar frameworks by different stakeholders."

Common language

Noer Adi Wardoyo, Vice-Chair of ISO/TC 207/SC 1 and Leader, SC 7 Ad Hoc Group on NWIP for GHG methodologies, picked up the theme of World Standards Day 2015 – " Standards : the world's common language " – in describing the value of the new GHG guideline standard ISO 14080, and in contemplating a world without ISO GHG standards.

" In stressing the importance of ISO 14080, we should also consider the downside of the standard not being in place – the consequence being a high risk of mismatch among climate actions and methodologies." He sees achieving global consensus by all GHG actors as one of the major accomplishments in developing ISO 14080. " It is really great to have ISO, UNFCCC, the World Bank, WRI, WBCSD, The Gold Standard, developed and developing countries, and many GHG players, collaborating in ISO 14080 to agree a common language. " ■

TOWARDS CARBON NEUTRALITY

with the future **ISO 14080**, *Guidance for methodologies on climate actions*

Quantification and reporting of **GHG emissions** and removals at the project level (ISO 14064-2)

Requirements for **GHG** validation/verification bodies for use in accreditation (ISO 14065)

Guidance for the application of ISO 14064-1 (ISO/TR 14069)

Competence requirements for **GHG** validation/verification teams (ISO 14066)

Validation and verification of **GHG assertions** (ISO 14064-3)

Quantification and reporting of **GHG emissions** and removals at the organizational level (ISO 14064-1)

COP21 CONFERENCE



Photo: Arnaud Bouissou – MEDDE/SG COP21

Paris climate deal to roll back global warming

A deal to attempt to limit the rise in global temperatures to less than 2 °C was agreed at the United Nations climate change summit (COP21) in Paris, France. Negotiators from nearly 200 countries reached the world's most significant agreement to address climate change since the issue first emerged as a major political priority decades ago.

The purpose is to hold global warming to "well below" 2 °C over pre-Industrial Revolution levels, and to strive for 1.5 °C if possible. The Paris Agreement is meant to signal the beginning of the end of more than 100 years of fossil fuels serving as the primary engine of economic growth and shows that governments from around the world take climate change seriously. The inclusion of both developed and developing countries, including those that rely on revenue from oil and gas production, demonstrates a unity never seen before on this issue.

ISO partnered with the Greenhouse Gas Management Institute (GHGMI) to present an official side event during COP21 on the theme "Climate neutrality and resilience". Participants looked at ways to grow collaboration among standards-setting organizations, decrease duplication and increase usability of climate change standards. Presentations were made by the GHGMI, the Climate Change Coordinating Committee (CCCC), ISO/TC 207/SC 7, The Gold Standard Foundation, EOS Climate and the Institute of Environmental Management & Assessment (IEMA).

The event explored how to progress standards-setting activities to respond to climate needs;

and what approaches, methodologies and sectors should be prioritized within the standards system to make the most meaningful contribution to industry and governments. Participants also considered where demand for international standards comes from and how we can move forward from today to build lasting strategies and increased global collaboration between ISO and all major standards development organizations.

A COP of firsts

Sustainable development was also taken into account in the organization of COP21, the first UN climate change conference to receive ISO 20121 certification. The standard specifies requirements for an event sustainability management system and provides guidance on conforming to those requirements. It is a concrete tool that helps ensure the event contributes to the three dimensions of sustainability: economic, environmental and social.

ISO 20121 has been designed to address the management of improved sustainability throughout all event-related activities during the entire management cycle. It requires organizations to recognize their relationship with, and impact on, society and society's expectations of an event.

In taking this approach, the government of France wished to establish and implement an event sustainability management system, ensure it was in compliance with its stated sustainable development policy, and demonstrate voluntary conformity with the standard.

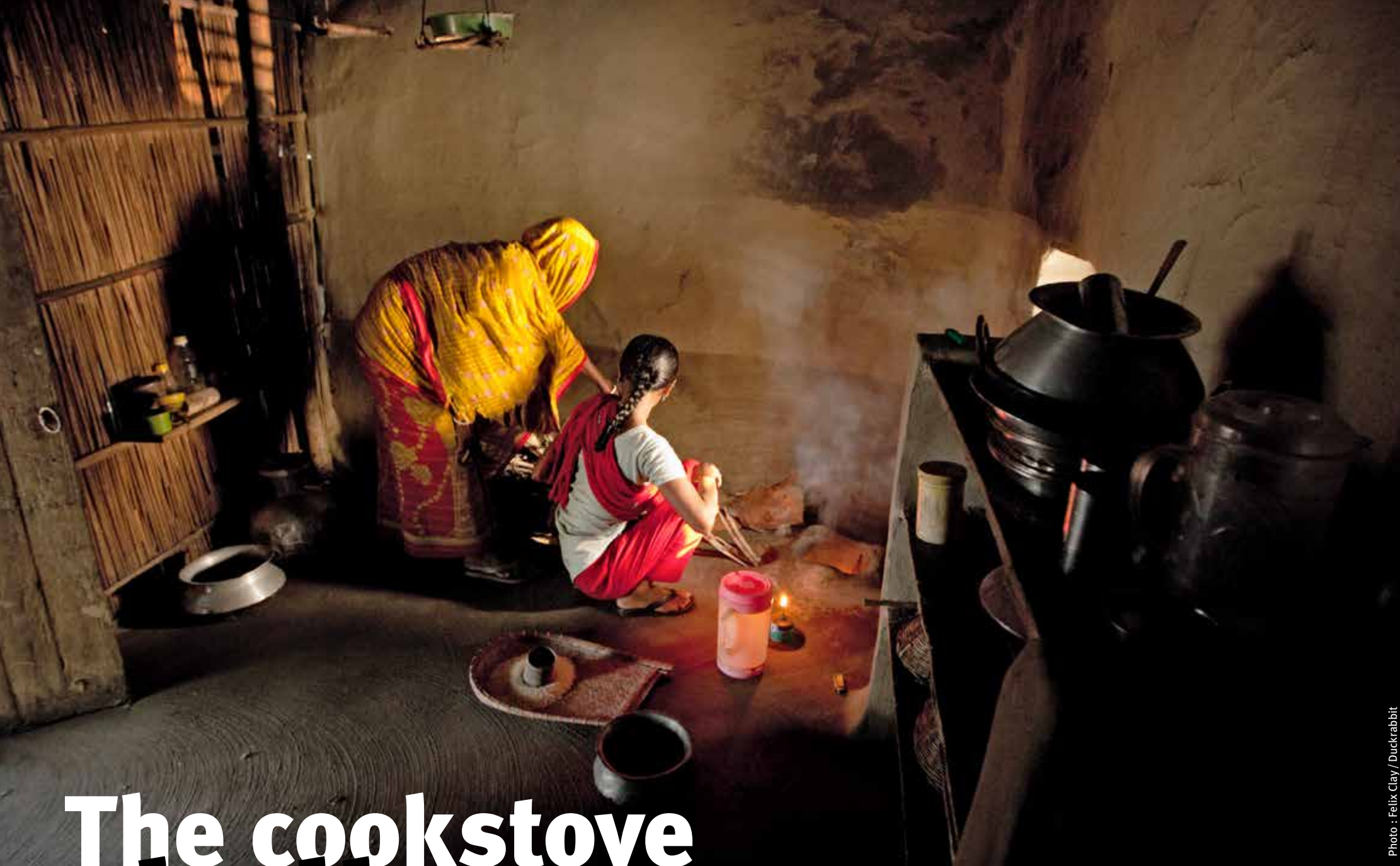


Photo : Felix Clay / Duckrabbitt

Cooking lunch the traditional way in Khulna, Bangladesh.

The cookstove challenge

by Elizabeth Gasiorowski-Denis

Cooking shouldn't kill, but for far too many people in developing countries, this is exactly what happens. ISO has joined the global community in working to create and sustain a thriving market for clean and efficient household cooking solutions. Together, we can make change happen.

Cooking the family meal can be dangerous for poor people in developing countries. Indeed, a 2015 World Health Organization (WHO) report estimates that exposure to smoke from the simple act of cooking constitutes the fourth leading risk factor for disease in developing countries, and causes more than four million premature deaths per year – exceeding deaths attributable to malaria or tuberculosis. In addition, tens of millions more fall sick with illnesses that could readily be prevented with the adoption of clean and efficient cookstoves and fuels. What's more, emissions due to cooking with biomass are a significant contributor to climate change. Could standards be the solution? According to Dr. Ranyee Chiang, Director of Standards, Technology and Fuels at the Global Alliance for Clean Cookstoves and Chair of ISO technical committee ISO/TC 285, *Cookstoves and clean cooking solutions*, standards can help provide rigorous definitions and goals for emissions (relevant for climate and health), efficiency, safety, durability and quality.

A critical first step

The Global Alliance for Clean Cookstoves, a public-private partnership hosted by the United Nations Foundation and comprising over 1300 partners, was launched in 2010 to coordinate an international approach to build a robust market for clean cookstoves. The Global Alliance's partnership with ISO was seen as an important platform to develop and apply standards to ensure the best possible cookstoves and fuels are available in the market. In February 2012, more than 90 stakeholders from 23 countries met in The Hague, Netherlands, for an ISO meeting that resulted in unanimous support among participants for an International Workshop Agreement (IWA 11:2012), which defines tiers of performance for efficiency, emissions and safety. The workshop was organized by the Global Alliance and the Partnership for Clean Indoor Air (PCIA), with the American National Standards Institute (ANSI) as the secretariat. To update these initial IWA guidelines and establish them as International Standards, ISO created ISO/TC 285 in 2013. Kenya, through the Kenya Bureau of Standards (KEBS), and the USA, through the American National Standards Institute (ANSI), are serving as co-secretariats of the committee.

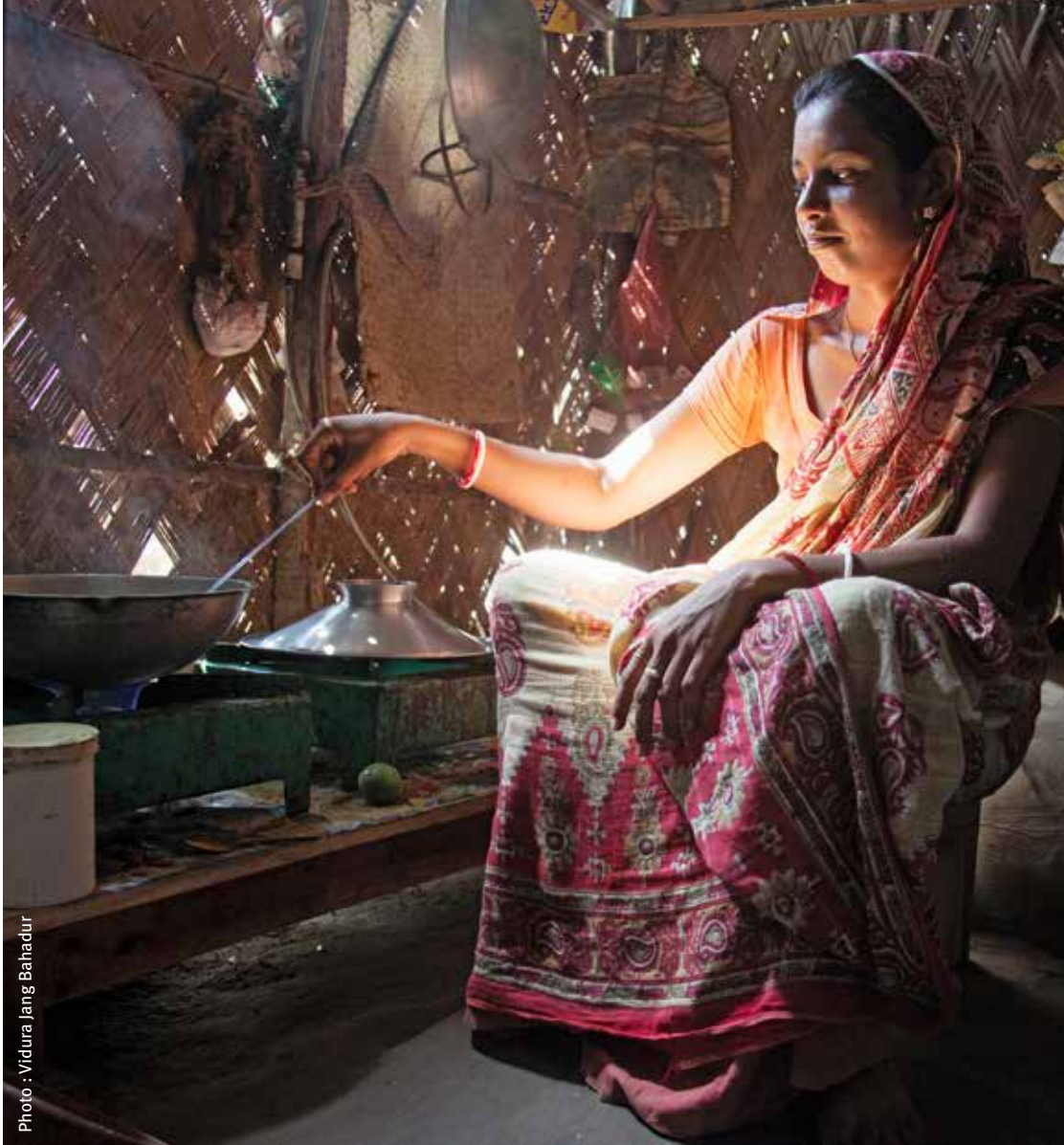


Photo : Vidura Jang Bahadur

A Bengali woman uses biogas, instead of traditional biomass, to cook the family meal – a cleaner, cheaper and healthier option.



Photo : US Mission Photo by Eric Bridlers

During the 65th World Health Assembly, the Global Alliance for Clean Cookstoves co-hosted with the US Mission Public Affairs Office, the World Health Organization, and the missions of Kenya and Norway, a side-event panel discussion entitled “ Clean Cookstoves : Home is Where Health Begins ”.

S. Joe Bhatia, ANSI President and CEO, comments : “ We can’t imagine a more critical issue than the health and safety of millions of people around the world. We are proud to play a leadership role in the efforts to assure the safety of cookstoves, and look forward to the tremendous impact this global partnership can achieve.”

ISO/TC 285 provides governments, industry and organizations around the world with the opportunity to become involved in the process of designing, implementing and updating standards dealing with this critical topic. In addition to the emissions and efficiency performance of the stove, the committee is looking at the following factors :

- *Harmonized methodology, indicators and reporting* – Facilitating international collaboration and trade
- *Local cooking habits* – Matching laboratory testing to users’ cultural and practical habits and available fuels
- *Safety* – Is it safe to use in the proximity of children and the whole family?

- *Durability* – The stove needs to be durable and easy to maintain
- *Field testing* – Guidelines for testing cookstoves and fuels performance and use in real-life settings
- *Social impacts* – Guidance on how to assess social impacts like time savings, gender impacts and livelihood impacts

Currently, there are four working groups (WGs) focusing on the development of standards and other essential documents in subject areas associated with cookstoves and fuels. Those WGs are : WG 1, *Conceptual framework*; WG 2, *Lab testing methods*; WG 3, *Field testing methods*, and WG 4, *Social impacts*. The standards being developed will be used to set government regulations, support donor and investment decisions and drive manufacturers to improve their technologies.

Increasing participation
– particularly from
developing countries –
is a big priority.

Getting developing countries on board

As of the end of 2015, the committee comprised 25 participating countries, 15 observing countries and eight international external liaisons organizations, including WHO. Increasing participation – particularly from developing countries – is a big priority for the Global Alliance’s Ranyee Chiang, who believes their contributions are vital for the adoption of standards that can strengthen the nascent cookstoves and fuels market. “ There are so many different ways to cook, and foods to eat, ” says Ranyee. “ Standards need to address performance, but we need to make sure technology options fit into the cultural context and can be used with available resources.” In most rural homes, a stove can be an open fire and the fuel as basic as wood, dried animal dung or agricultural residue, together known as “ biomass ” fuels.

The cookstove challenge


FRIGHTENING FACTS

According to a World Bank and Global Alliance for Clean Cookstoves technical report published in 2015, solid-fuel dependence has multiple underlying effects


 economic


 environment

 health


 Significant spending of **USD 38-40 billion** annually on solid fuels for cooking and heating, of which a large share is avoidable.




 Substantial emissions from solid-fuel use and charcoal production of **0.5-1.2 billion tonnes** in carbon dioxide (CO₂) equivalent of Kyoto Protocol greenhouse gases (up to 3 % of annual global CO₂ emissions).

 At least **4.3 million** premature deaths per year resulting from household air pollution.

 **25 %** of global black-carbon emissions.

 **140 million** potentially productive person-years annually wasted on biomass fuel collection and avoidable cooking time.

 **110 million** disability-adjusted life years (DALYs) resulting from household air pollution, including lower respiratory infections, chronic obstructive pulmonary disease, lung cancers, heart disease, and cataracts.

 Consumption of **~1.36 billion tonnes** of wood fuel across the developing world, with contribution to forest degradation and deforestation most likely from charcoal production in Africa and Asia.

In Honduras, Victoria Cortés, an Associate Professor at the Regional Testing and Knowledge Center (RTKC) at Zamorano University in Tegucigalpa, who aims to strengthen the national outreach programmes and adoption of clean cookstove technologies, says it's essential to participate in the work of ISO/TC 285.

"Being part of ISO/TC 285 enables the RTKC to contribute to the creation of standards based on technologies used in the region, for example the *plancha* (griddle) cookstoves," explains Victoria. "We are participating in the ISO standards work helping to establish guidelines on the rating and evaluation of cookstove models, to encourage positive innovations based on health, environmental and technical issues."

For the Regional Testing and Knowledge Center at Zamorano, ISO/TC 285 standards will enable the Center to provide high-quality assessments and contribute to the dissemination of efficient and optimum models on the national and regional market, based on reliable and tested performance.

Where there's hope...

While the challenges are daunting, there are now good reasons to believe the next decade will be a transformative period for the global cookstoves and fuels sector. Broader access to cleaner, more efficient cooking solutions is within closer reach thanks to the work being done by ISO/TC 285.

That leads to the next challenge – developing a global cookstoves and fuels industry that is constantly innovating to improve design and performance, while improving affordability and access to the best possible technologies.

Clearly, there is still a lot to be done. ISO/TC 285 needs more countries who are actively collaborating on standards development and implementing policies to change the reliance on solid fuels and inefficient, polluting cookstoves that come at a huge human cost.

We applaud the Global Alliance's ambitious goal of getting 100 million homes to adopt clean and/or efficient stoves and fuels by the year 2020, and the determination of ISO/TC 285 to provide solutions that will spur confidence among stakeholders. Let us now hope that the next five years will enable half of the world to cook safely. ■

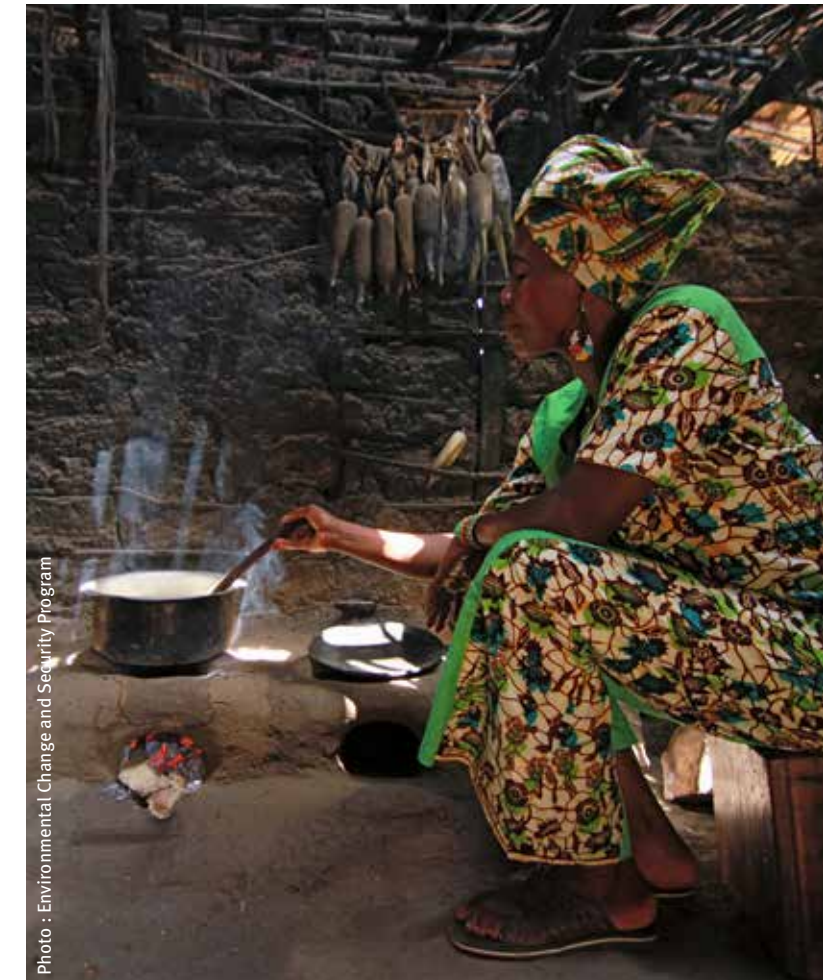


Photo : Environmental Change and Security Program

Along the northern coast of Tanzania, a series of innovative development projects combine conservation efforts with health and livelihood programmes.

The Global Alliance's ambitious goal is to get 100 million homes to adopt clean and/or efficient stoves and fuels by the year 2020.

Honduras hopes for cleaner cookstoves

MEMBER EXCELLENCE

With a new ISO technical committee on clean cookstoves, Honduras is able to make its voice heard and help millions of its country's households. Here, ISO's member for Honduras shares its experience and hopes for a cleaner future.

Globally, more than three billion people continue to rely on traditional biomass to meet their household energy needs. In Central America, approximately 20 million people cook in this way (more than half of the region's population) and 86 % of these are located in Guatemala, Honduras, Nicaragua and El Salvador. Toxic fumes from open fires or inefficient cookstoves inside homes are responsible for millions of premature deaths – mostly women and children – each year in developing countries.

Sandra Gómez, CEO of OHN, Honduras' national standards body and ISO member for the country, tells us that most of the people in Honduras have known these stoves – and their dangers – since childhood. Many families in her native Honduras cooked on one. Today, nearly one million Honduran households use wood stoves as the primary means to cook food. It's no surprise therefore that OHN is one of 25 ISO members participating in the work of ISO/TC 285 on clean cookstoves.

With millions of injuries and deaths caused annually by open fires and traditional cookstoves, ISO/TC 285 represents a major step towards defining criteria for clean, efficient and safe cookstoves. Here, Sandra Gómez describes the importance of clean cooking sources and how ISO/TC 285 can make a difference.

ISOfocus : Why are cookstoves so important for Honduras?

Sandra Gómez : Cookstoves are important to Honduras for many reasons. As part of Honduras' strategies, within the framework of the Country Vision (2010-2038) and the National Plan (2010-2022), is the sustainable use of its natural resources, minimizing environmental vulnerability by promoting forest management and the use of timber and non-timber products that are generated by the forest and ecosystems.

According to the 2011 National Energy Balance, 43.4% of the energy consumed nationally comes from biomass, among which dominate wood and charcoal. In addition, about one million households in Honduras use wood stoves as the primary means for preparing food, which has an impact on the natural, economic and health resources (high rates of deforestation, health problems related to the greenhouse gas emissions, and problems caused by the inefficient and unsustainable use of wood); for all these reasons, clean cookstoves are a priority topic for Honduras. No less important are the international commitments that the government has made to comply with the mitigation of climate change.

It is important for Honduras to participate in the work of ISO/TC 285.

Why is it essential for a country like Honduras to participate in ISO/TC 285 work?

It is important for Honduras to participate in the work of ISO/TC 285. Among the benefits of our participation are :

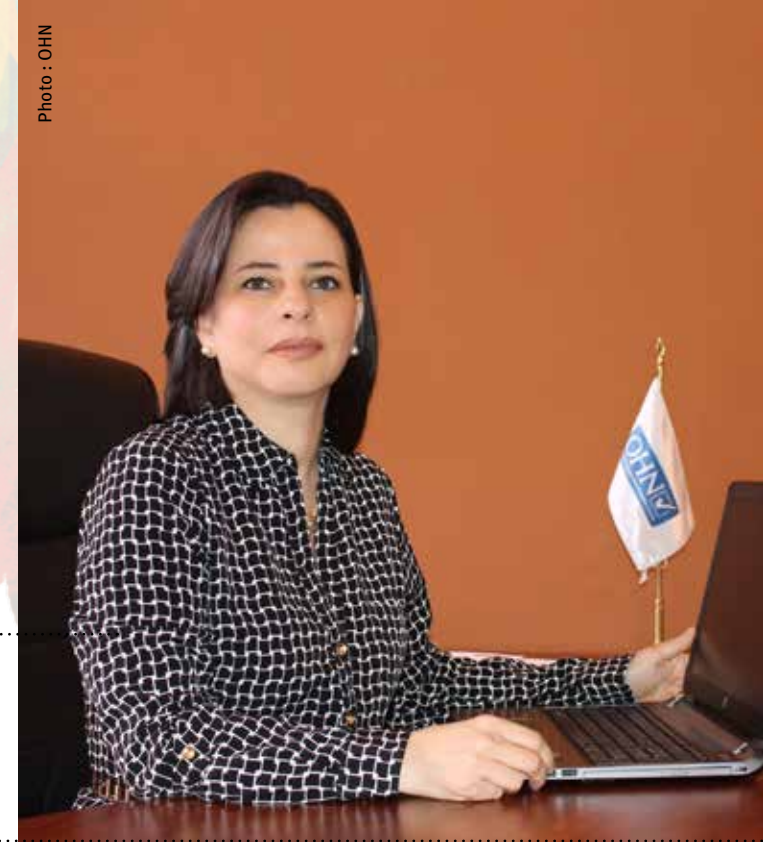
- Constantly updated and easily accessible information (due to knowledge and experience shared among participants)
- Improved ability to identify future trends (due to research developed during the design of the standard)
- The capability to influence the resulting standard based on our own technological reality and experience (the use of " plate " stoves at national and regional levels)

Finally, our participation, combined with the use of International Standards, helps to avoid unnecessary barriers and unfair trade practices.

What has been your experience so far?

Our focus to date has been related mainly to lab testing methods (working group WG 2 of ISO/TC 285). This experience has provided us with a lot of useful information about the different methodologies and equipment that could be used for the evaluation of improved stoves. Definitions and assessment methods related to plate stoves have also been integrated.

In the future, we hope to join other working groups of ISO/TC 285. This will give us the opportunity to work and learn from leaders in the field and to contribute our own national experience in the development processes.



Sandra Gómez, CEO of OHN, Honduras' national standards body and ISO member for the country.

Honduras is also a national partner country in the Global Alliance for Clean Cookstoves. What positive synergies does this collaboration offer?

The resulting synergies with the Global Alliance for Clean Cookstoves have strengthened the sustainability of an Assessment Centre for Improved Stoves. The centre is located at one of our universities and constitutes a reference for the Central American Region. The region's common needs have also led to the establishment, through sponsorships, of workshops and forums in Honduras, involving the participation of different experts in the field.

What are your expectations for the future?

Our hope is that the International Standards being developed by ISO/TC 285 will apply to different types of stoves by taking into account each model with its specific features, as well as the needs of end users. They should be clear, easy to understand and contain realistic goals.

The standards are expected to become a roadmap for stove manufacturers and developers to create innovative technologies in order to further improve their existing models and to become a reference tool for the schemes of conformity assessment and the means to facilitate mutual recognition agreements on trade. Last but not least, the goal is to scale up the proper use and adoption of clean cookstoves in poor and low-income households in Honduras and provide a cleaner, brighter future for our children and society. ■

CHINA DIALOGUES WITH PRESS

Representatives of major English-language newspapers and magazines in China attended a recent dialogue on standards in Beijing, sharing what they have learned about creating successful stories and how media can work to make standards more visible and accessible.

The dialogue is the first of its kind in China where the media and standards communities converge to share new ways of thinking, building strong relationships and defining new strategies that address key standards challenges while raising the profile of standards in an ever-changing marketplace.

The event was organized by the China Standardization Press (CSP), the only state-level media devoted to standardization in the country. CSP Vice-President Jenny (Zhiyang) Liu commented: "It is through dialogue that we can establish a platform by which the standardization community and mainstream media can exchange information and improve mutual understanding. Mainstream media needs to be able to access standards, and promote and extend their influence across the world. So let's work together to make this happen."

In addition, during the event, Jenny shared her thoughts on ways to improve CSP's English-language magazine, *China Standardization*, by making it more accessible and widely read. She also explained the importance of the Chinese version of *ISOfocus* to help the country's population stay current with International Standards trends. A memorandum of understanding was signed between the University of International Business and Economics and CSP to set out opportunities for collaboration and positive academic engagement between students and standards community to mutual benefit.



Photo: China Standardization Press



TRACEABILITY, A BASIS FOR FOOD SAFETY

ISO was invited to join in a conference on the traceability of agricultural produce, which took place in Geneva, Switzerland, in November 2015. Hosted by the United Nations Economic Commission for Europe (UNECE), the event gathered experts from the public and private sectors, international organizations and NGOs to discuss the broad strokes of food traceability and its practical applications.

Participants explored options for more secure labelling and marking requirements enhancing supply chain traceability and examined solutions applicable to all agricultural sectors, from seeds and nuts to fruits and meat.

Voicing a general concern, UNECE Deputy Executive Secretary Andrey Vasilyev explained: "While there are many sector and country initiatives to improve traceability, there is a risk that they will contribute to the spread of different solutions, unless further action is taken to harmonize standards and solutions."

That's where ISO standards fill the gap. As Marie-Noëlle Bourquin, Technical Group Manager, Standards Development, at ISO, explained, ISO standards serve as the bridge between private and public sectors, helping to ensure that the relevant food safety hazards are identified and adequate controls are put in place at each step of the food chain.

The conference provided a wealth of solutions for improving traceability, which will stand UNECE in good stead for future work on agricultural quality standards.

BOOST TO PUBLIC POLICY

International Standards help governments and regulators achieve public policy goals, and the key is effective dialogue. This is one of the conclusions of experts at the conference on standards and policy, held in November 2015 in Geneva, Switzerland.

Jointly hosted by IEC, ISO and the United Nations Economic Commission for Europe (UNECE), "Using and referencing International Standards to support public policy" looked at the many ways that standards can benefit policy makers.

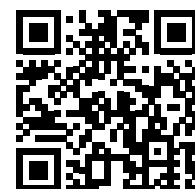
The one-day event explored the benefits of referencing standards in regulation, how standards can help implement policy commitments taken at the global level (e.g. sustainability, resilience and development goals), and much more. It provided a unique opportunity to connect national and international policy makers with standards developers in order to share experience and best practices.

Acting ISO Secretary-General Kevin McKinley said it was important that standardizers and policy makers work closely together to not only support the policy-making process, but keep standards relevant as well.

"International Standards can provide much of the technical detail and safety requirements needed to make a good policy work," he said. "This conference demonstrated the synergies for both standardizers and public policy and how they can collectively contribute to more effective and sustainable world trade."



To learn more on how standards can help, read the brochure *Using ISO and IEC standards to support public policy*.



ISO JOINS TRAINING ON WTO AGREEMENTS FOR ASIA REGION

In November 2015, ISO gathered with other organizations in Bangkok, Thailand, for a training workshop that brought together 18 member countries from the Asian region. Hosted by the World Trade Organization (WTO), the workshop focused on commitment and implementation issues arising from the two WTO Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS).

Despite having run several such workshops, this was the first time the WTO tackled both TBT and SPS issues at the same event. It was also the first time representatives from international standards bodies had been invited to provide information about the mandates, operations and services of their organizations, including technical assistance programmes for developing countries.

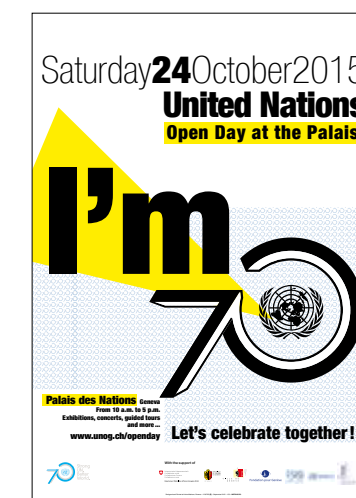
ISO was in good company at the event, which included its sister organization, the IEC, the Codex Alimentarius Commission, the World Organization for Animal Health (OIE), the International Plant Protection Convention (IPPC) and the United Nations Industrial Development Organization (UNIDO).

The workshop addressed the importance of international standards and conformity assessment schemes in support of regulation as well as the obligation for WTO members to notify measures that may have a significant trade impact on other members. Country representatives described the TBT and SPS challenges they face and how operations were organized in their respective countries.

ISO CELEBRATES UN'S 70TH ANNIVERSARY

To help celebrate the UN's 70th anniversary, the United Nations Office at Geneva (UNOG) organized an Open Day at the Palais des Nations in Geneva, Switzerland, on 24 October 2015. Some 19 000 visitors enjoyed a variety of activities, including stands, concerts, live performances, exhibitions and much more, as they learned about the work of the United Nations and International Geneva.

ISO, along with 80 other organizations, was invited to man a stand where people could discover the world of standards through a number of fun activities such as a card game highlighting the ISO graphical symbols seen in everyday life, a world map of currency codes and country codes, and a puzzle unveiling the importance of standards in the food supply chain. ISO also took part in a rally organized by the Eduki Foundation, which attracted around 500 families and 1 000 children.



ISO 26000 in the post-2015 development agenda



In January 2016, the 2030 Agenda for Sustainable Development came into effect. Now, the eyes of the world are on solutions to guide international development and cooperation for the 17 initiatives (goals) over the next 15 years. Can ISO 26000 make a difference?

At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030.

The SDGs are a new, universal set of goals, targets and indicators that UN member states will be expected to use to frame their agendas and political policies over the next 15 years. They follow and expand on the Millennium Development Goals (MDGs), which were agreed by governments in 2001 and expired at the end of 2015.

So where does ISO 26000 on social responsibility fit into the picture? According to Professors Adriana Rosenfeld and Adriana Norma Martínez from the National University of Luján in Argentina, ISO 26000 addresses sustainable development and the post-2015 development agenda in a coherent and complete way. The core subjects and issues defined by the ISO standard include human rights, labour practices, the environment, fair operating practices, consumer issues and community involvement, which encompass, among other things, the principles of equal opportunities and non-discrimination. ISO 26000 provides a visible, influential and pragmatic way to impulse change, and meet the SDGs.

17 Sustainable Development Goals (SDGs)



There is a real potential
for ISO 26000.

Here, Rosenfeld and Martínez highlight the reasons why.

ISOfocus : What is the relationship between ISO 26000 guidance on social responsibility and sustainable development ?

Rosenfeld and Martínez : Even if the concepts of sustainable development and social responsibility are frequently used interchangeably, sustainable development refers to the economic, social and environmental goals common to all people whereas social responsibility refers to an organization's responsibilities to society and the environment. So when an organization decides to undertake and implement social responsibility, the overarching aim of course is to contribute to sustainable development.

ISO 26000 provides guidance on how businesses and organizations can operate in a socially responsible way. It clarifies what social responsibility is, helps businesses and organizations translate principles into effective actions and shares best practices from around the world relating to social responsibility.

The ISO standard is designed to assist organizations in contributing to sustainable development, encouraging them to go beyond basic legal compliance, and to promote a common understanding in the field of social responsibility, complementing other existing instruments and initiatives.

What kind of opportunities/synergies does ISO 26000 represent for sustainable development ?

There is a real potential for ISO 26000 to make a positive contribution to sustainable development. The standard covers the majority of direct sustainable development issues, such as environmental impacts and human rights. Indeed, it has a broader scope than most sustainable development standards.

We undertook an analysis to review the opportunities and synergies between the SDGs and ISO 26000. The academic work consisted of a detailed examination comparing the SDGs and their targets to ISO 26000, in general, and Chapter 6 (Guidance on core subjects of social responsibility), in particular.

Organizations
can contribute to
sustainability by using
the ISO standard.

The conclusion of the study and analysis was that both documents share the general objective of fostering sustainable development and the conceptualization of sustainable development, recognizing the economic, social and environmental dimensions and their interdependence.

Could you please describe how ISO 26000 could help meet the SDGs ? Could you give an example or two ?

The SDGs are providing valuable opportunities to advance human dignity and rights. They reaffirm the importance of freedom, peace and security, the right to development and the right to an adequate standard of living, including the claim to food and water, the rule of law, good governance, gender equality, empowerment of women and the overall commitment to just and democratic societies that support such development. This approach is similar to ISO 26000. The ISO standard recognizes the respect for human rights in one of its seven core subjects.





Secondly, the SDGs include a stand-alone goal on equality and the empowerment of women and girls as well as gender-sensitive targets in other goals. Here again, ISO 26000 shares a similar approach. The gender dimension cuts across the International Standard, and is expressed in “ Gender equality and social responsibility ” (Box 2 in ISO 26000) : “ There is a demonstrated positive link between gender equality and economic and social development. [...] Organizations should review their decisions and activities to eliminate gender bias and promote gender equality.” Last but not least, environmental issues are also a major theme that runs through the SDGs and a core subject contained in ISO 26000.

How can ISO 26000 help companies on their path to sustainability? Here again, could you please provide an example or two.

According to ISO 26000, the objective of sustainable development is to achieve sustainability for society as

a whole and for the planet. The analysis we undertook of the SDGs and ISO 26000 clearly suggests that organizations can find items that allow them to contribute to sustainability by using the ISO standard.

The relationship between the two documents is conspicuous. Take, for instance, Objective 13 of the SDGs, “ Take urgent action to combat climate change and its impacts ”, and Issue 3 of ISO 26000, “ Climate change mitigation and adaptation ” (within the core subject : “ The environment ”). The International Standard explains the core subject by providing information on its scope, its relationship to social responsibility, its related principles and considerations, and its associated issues. In particular, subclause 6.5.5 of ISO 26000 describes the issue, provides a set of ten related actions and expectations and gives examples of climate change adaptation actions.

There’s no doubt that the standard’s use by all types of organizations and the promotion of social responsibility in their value chains (Core subject 6.6, “ Fair

It is vitally important
to increase the global use
of ISO 26000.

operating practices ” / Issue 4) will contribute to the achievement of the SDGs.

What are your hopes and aspirations for the future use of ISO 26000?

ISO 26000 is the most comprehensive and concise guidance of what an organization should do to contribute to sustainable development – for that reason, it is extremely useful. It constitutes a valuable tool for the implementation of the post-2015 development agenda.

It is vitally important to increase the global use of ISO 26000, and, in so doing, enable partnerships among governments, private sector and civil society. These will be key to ensuring the SDGs are met and our planet’s sustainability is secured. ■



Ways to control carbon

A temperature rise of more than 2 °C relative to the pre-industrial era would have a devastating effect on our global environment.

In order to limit global warming, we need to put a cap on the cumulative CO₂ emissions from all human sources.

ISO has standards that can help reduce GHG emissions, including in the following sectors.

Energy production

Nuclear energy, nuclear technologies, and radiological protection; solar energy; natural gas; solid biofuels; energy management; sustainability criteria for bioenergy; biogas; evaluation of energy savings; light and lighting; domestic gas cooking appliances; energy efficiency and renewable energy sources; carbon dioxide capture, transportation, and geological storage...

GHG emissions
35 %

Agriculture

Tractors and machinery for agriculture and forestry; food products; starch; fertilizers and soil conditioners; soil quality; fisheries and aquaculture; biotechnology; feed machinery...

GHG emissions
14 %

Waste and water treatment

Water quality; environmental management; service activities relating to drinking water supply systems and wastewater systems; sludge recovery, recycling, treatment and disposal; water re-use; waste management, recycling and road operation service...

GHG emissions
3 %

Residential and commercial buildings

Buildings and civil engineering works; concrete, reinforced concrete and pre-stressed concrete; cement and lime; wood-based panels; cranes; bases for design of structures; industrial trucks; pumps; glass in building; doors and windows; thermal performance and energy use in the built environment; building environment design; floor coverings...

GHG emissions
6 %

Tropical deforestation

Paper, board and pulps; timber structures; timber; chain of custody of wood and wood-based products; bamboo and rattan...

GHG emissions
10 %

Industrial production

Screw threads; rolling bearings; steel; paints and varnishes; textiles; machine tools; chemistry; plastics; textile machinery and accessories; mining; protective clothing and equipment; powder metallurgy; packaging; non-destructive testing; optics and photonics; cosmetics; materials for the production of primary aluminium; nanotechnologies; industrial furnaces and associated processing equipment; additive manufacturing; risk management...

GHG emissions
18 %

Transport

Ships and marine technology; aircraft and space vehicles; road vehicles; freight containers; cycles; small craft; intelligent transport systems; road traffic safety management systems; railway applications...

GHG emissions
14 %



Photo : enabisu

Luxury brands are setting themselves ambitious targets.

Luxury, style & sustainability

by Margo Koniuszewski

Sustainability is slowly but surely rising in prevalence amongst luxury brands. The selling point has become that it is the logical and only way to do profitable business.

Around the globe, the sustainability movement is gathering pace. On the heels of many large multinationals, some luxury brands are making progress towards more sustainable, ethical and ecologically responsible business. The growing preoccupation with environmental issues has led designers to look at new ways of creating by merging luxury with sustainability. Many luxury brands are redesigning their packaging, using eco-friendly raw materials, pursuing sustainable practices such as lower water and energy consumption, and organizing and supporting various social and environmental initiatives. Can luxury be sustainable? Margo Koniuszewski, Co-founder of The Bridge Foundation, a non-profit organization that raises awareness about global issues, argues that it can. She believes that a new class of luxury has emerged and sustainability is now more desirable than ever. While many challenges remain, steps towards sustainability by luxury brands still represent a positive change, regardless of how big or small. In the long-term, she contends, the industry will have to become sustainable in order to remain profitable. Here, The Bridge Foundation co-founder examines best practice.

Ten years ago, while buying lipstick at the stand of a leading luxury cosmetics brand, I asked if I could bring back the empty packaging for reuse by the company. The startled sales lady replied : “ I am sorry Madam, we do not practise such things here.” This is not the case today.

Sustainable luxury

Premium brands like Guerlain, the exclusive French *parfumeur*, encourage their customers to return product packaging, which is then dispatched to special centres for sorting, recycling and recovery.

On the surface, sustainable luxury sounds like an oxymoron. After all, the word luxury, derived from the Latin word “ *luxus* ”, conjurs up images of pomp, excess and indulgence. Then again, sustainable products also share similar “ essential ” qualities of luxury goods : an emphasis on origin, artisanship and durability.

Luxury industry revenues exceeded EUR 220 billion in 2014.



Before luxury brands began to resemble large corporations – i.e. fashion houses that spend billions on marketing – they were associated with strong family values, cultural heritage, meticulous craftsmanship and a timelessness whereby fine jewellery and watches were passed down the generations. While this still holds true, we must add the ecological and social innovations that are necessary to ensure a sustainable future.

Without nature, no business

In a bid to preserve their future, luxury brands must – and many already do – work to alleviate social and environmental concerns. Global warming, deforestation, dwindling resources and rampant pollution disturb the favourable conditions that have allowed the luxury industry to thrive for so long.

As Bernard Arnault, CEO of the LVMH Group, a corporation comprising over 60 luxury brands, aptly concludes: “LVMH owes a lot to nature.” This is why supply chain monitoring, eco-design, energy-efficient lighting, waste management and the protection of ecosystems have become part and parcel of the company’s various brand strategies. The Group sponsored the Bridge Foundation event “ Bridging Luxury and the Environment ” in Warsaw, Poland, where many of its strategies for incorporating care for the environment into business were discussed.

Setting trends

There is good reason to believe the industry can act as a catalyst towards a more sustainable world. Luxury industry revenues exceeded EUR 220 billion in 2014¹⁾. French brands are very strong in the sector, with LVMH Group at the helm boasting revenues of EUR 30.6 billion in 2014.

With this scale of business, the industry’s behaviour can have a big influence on consumer attitudes and lifestyles by making sustainability an integral part of their narrative on luxury goods. Explaining how a product is made from quality raw materials with minimal environmental impact can give a brand a competitive edge.

In addition, luxury brands are setting themselves ambitious targets that include curtailing carbon emissions, reducing water and waste impacts of products, eliminating the use of hazardous chemicals, and policing the ethical conduct of their suppliers.

1) According to a report by consultancy firm Bain and Company.

Customers actively support this process by demanding more responsible behaviours from their favourite brands. The global emergence of social and environmental awareness represents the most important cultural transformation of the 21st century – to which the luxury segment must provide leadership if its brands are to retain their prestige.

Sustainable luxury is also the opportunity to promote responsible resource consumption. Far from today’s “ buy and bin ” culture, the concept of emotionally durable design encourages the purchase of higher-value items. Luxury brands often work to design quality goods that are long-lasting and easy to repair, contrasting with the planned obsolescence of fast-moving consumer goods.

More for less

To be viable, businesses need to find novel ways of manufacturing products sustainably and reducing their reliance on non-renewable resources. This starts with increased resource productivity, i.e. getting more goods or services from less material or energy. Belvedere, a brand of Polish rye vodka produced and distributed by LVMH, has converted its Polmos Zyrardów distillery in Poland from oil to natural gas and improved its energy efficiency through a heat recovery system. With this solution, annual

The benefits of
“green solutions”
far exceed the image.



Photo : Bridging Luxury & The Environment Project





carbon emissions were reduced by 36 % – or 2000 tonnes – the equivalent to removing 900 cars from Polish roads. Furthermore, the company launched a programme to optimize energy use in 2012, trialling new LED lighting technologies that helped reduce the power consumption at their Louis Vuitton boutiques worldwide by 50 %. LEDs, it turns out, do a better job of highlighting showcased products than incandescent or fluorescent light bulbs.

To address the issue of pollution, LVMH has been using CEDRE (*Centre Environnemental de Déconditionnement et Recyclage Écologique*), a platform dedicated to the recovery and processing of waste generated from the manufacture, distribution and recycling of its product packaging. In 2014, it processed around 1 600 tonnes of glass, paper, wood, metal and plastic.

Cognac house Hennessy has also been making changes. Putting a cap on CO₂ emissions, it has been modernizing its vehicle fleet – more than 80 % of its cars are now green (electric and hybrids). The company installed charging

stations at factories and treated employees to eco-driving lessons, which helps to reduce fuel consumption, accidents and maintenance costs. Similarly, beauty retailer Sephora uses a fleet of electric trucks to serve distribution centres located in cities across France, curbing costs and urban pollution.

In total, in 2014 the LVMH Group invested EUR 16.6 million in environmental protection, including waste management, water recycling, reduction of soil and noise pollution, and various projects supporting biodiversity.

The Group has also invested in an environmental management system approach, with 42 % of its industrial, logistics and administrative facilities certified to ISO 14001 by the end of 2014. This approach enables the Group's brands to measure the environmental impact of their activities, align with the ongoing improvement momentum, and increase the credibility of their commitment to the environment. LVMH also achieved ISO 14001 certification in 2014 for the Louis Vuitton Leather Goods and Accessories logistics

Luxury and sustainability can go hand in hand.

chain : from the point of departure from the manufacturing workshops to arrival at the store doors.

The caring brands

Luxury brands are now building their core image around caring for society and the environment. And, in truth, one can scarcely conceive of anything more appealing to wealthy eco-consumers than the fully biodegradable isothermal Veuve Clicquot champagne casing that is entirely made of potato starch and paper.

Meanwhile, Guerlain has taken bees under its wing. As the company symbol, the world's most essential pollinators have a special resonance with the perfume house, which sponsors the protection of the unique " Breton black bee " of Ouessant Island. The brand also supports the restoration of tropical forests through its Guerlain Orchidarium research platform, which spans three centres across the globe : the Experimental Garden in Geneva, Switzerland, a special nature reserve in China, and the Basic Research Laboratory in Strasbourg, France. But the business case for sustainability is made even more compelling because the benefits of " green solutions " far exceed the image – beyond " green recognition ", they can also improve the bottom line through efficiency and cost reductions.

Sweet living

Sustainable luxury is here to stay. I'm convinced that those who want products of the highest quality do not have to compromise on ethics – luxury and sustainability can go hand in hand.

" Buy less and make it last." That's the new motto for modern, sustainable living. As tempting as it might be to solve our global problems by limiting our consumption to monastic levels of frugality, in practical terms this is nigh on impossible. But with a focus on well-made, durable goods, luxury brands have a big role to play in finding a way to sustainably meet the world's needs. ■





Photo : Mutua Madrileña

Mutua Madrileña's energy management strategy

by Maria Lazarte

When one of Spain's largest insurance groups decided to implement ISO 50001 on energy management systems, it knew that it would be no small feat. But with 23 buildings comprising a surface area of 208 000 m², Mutua Madrileña believed the challenge was worth taking. And today, the group's results are paying off.

On the surface, the Mutua Madrileña Group might appear like your average large successful insurance company. It covers more than 10 million clients spread across several industries including : automotive, motorbikes, life, healthcare, legal protection, home, deaths, assistance, subsidies, accidents, mutual funds and pension plans. Its assets are worth EUR 6 644 million and it employs over 6 000 people.

The group is proud of its premises, which meet the needs of even the most demanding clients. Yet Mutua Madrileña realizes that the grounds we most need to take care of are the planet we live on. In the true spirit of an insurance company looking out for future eventualities, Mutua chose to act now rather than regret later by committing to protect the environment and reduce its energy waste.

As Mario Cabezos, Risk Prevention and Environmental Manager at Mutua Madrileña, puts it, " The Group strives

to respect the environment and promote sustainable mobility. It therefore aims to be at the forefront of the most advanced systems, methods, tools and techniques to improve resource use, waste management and energy efficiency in its buildings."

At Mutua, energy management is much more than social responsibility, it's also a commercial and business asset. That's because energy efficiency makes good business sense. For example, savings achieved in the various Mutua buildings help customers reduce their costs and make the real-estate offer more competitive.

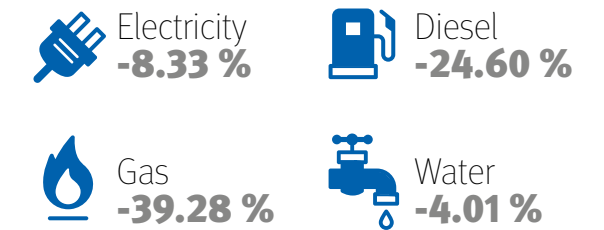
Finding the right tool

Mutua Madrileña's journey began in mid-2013 when, following an analysis of various environmental management systems, the company's top management opted for



Mutua Madrileña in figures

For Mutua Madrileña, ISO 50001 resulted in reductions of :



ISO 50001. They considered it the best tool for achieving continuous improvement processes and energy savings. “ ISO 50001 suits our needs perfectly thanks to its versatile and flexible implementation, which is focused on energy savings,” explains Mario. “ It also allows us to evaluate the scope and the pace of implementation of different measures in accordance with our strategic plans.”

In addition to including the Group’s corporate headquarters and large rented buildings as some of the challenges to the system, the insurance company also decided to add water usage, water being a notoriously limited resource in Spain.

Elements of success

When Mutua Madrileña first started implementing its energy management system across 14 buildings operated by external maintenance staff, the task appeared Herculean. Soon, though, experience showed the contrary. Once they had the right elements on board – top management commitment, the integrated and interrelated areas of the company and partner companies, and training activities at all levels of responsibility – the system began running smoothly.

“ All these elements were essential for us to achieve our goals,” says Mario. Having everyone in the company on board was also key. “ Part of our success was due to the creation of a Committee on Energy Saving and Efficiency,

involving the participation of the area directors/managers with roles and responsibilities in our system. This regular forum was instrumental for adopting decisions and achieving continuous improvement,” he concludes. The various training activities also sent out the message that participation was necessary to improve the system, and flexible channels were created to respond to every proposal or issue.

However, in Mario’s view, this wide level of support couldn’t have been achieved without the commitment of senior management, which reached all the way through to the Group’s President. Despite being an insurance company, where the impact of energy use may seem relatively unimportant, Mutua’s top management had shown great interest in having a beneficial system for the company, its customers, and, ultimately, for society as a whole.

Unveiling the benefits

The implementation of the Mutua Madrileña Group’s energy management system began in April 2014. Since then, it has achieved significant savings, including the following reductions : electricity by 8.33 % ; gas by 39.28 % ; diesel by 24.60 % ; water by 4.01 %.

“ Perhaps the most relevant aspect of the system is that it takes into account the impact of variables affecting consumption, such as climate severity or the level of building occupancy,” continues Mario.

Indeed, when analysing results, Mutua uses statistical methodologies that rule out how changes in the weather and the number of tenants affect energy usage. This way it can ensure that consumption reduction is truly the consequence of better energy management rather than external factors.

Most of the savings come from operational control adjustments. “ This is a system based on an in-depth analysis. Decisions on when we start or finish production, or on what thrust or return temperature we set, have a big impact on the final outcome,” says Mario.

The most interesting is that these savings were achieved with little investment, so the company did not have to wait long to start reaping the benefits. “ The energy system has made a real difference to the company’s financial results and to its competitive capacity in the real-estate market,” concludes Mario. While increased efficiency means significant economic savings, what really matters is that the Group is laying the foundations of a system designed to ensure higher-energy performance in the future. Mutua Madrileña has just audited its ISO 50001 system and was successfully certified to the standard without a single non-conformity, across all 14 buildings. “ We can now proudly boast that we have one of the most efficient energy management systems in Spain!” says Mario. ■



Mario Cabezos (centre) flanked by Noelia Fernández and Tomás Sánchez-Barriga of Mutua Madrileña’s Energy Management Team.

French real estate builds on **positive energy**



Photo : CA Immobilier

by Sandrine Tranchard

If you are in commercial real estate, you know the importance of a successful energy management plan. With its latest certification to ISO 50001, Crédit Agricole Immobilier's real estate heralds a promising future for smart commercial buildings.

The mounting risks of climate change, rising demand for sustainable workplaces and maturing market for smart building technologies are inspiring commercial property owners to invest in energy efficiency across their real-estate portfolios. Given that existing buildings account for up to 40 % of the worldwide energy use, and associated greenhouse gas emissions, real estate represents a growing potential to track and implement energy efficiency.

With its 2.9 million sq. m. of residential and commercial premises, Crédit Agricole Immobilier (CA Immobilier) – the specialist real-estate subsidiary of Crédit Agricole Group – is no stranger to this trend. For the French property developer, whose commitment to sustainable development dates back many years, implementing an energy management system based on ISO 50001 was the obvious choice to reduce its energy footprint.

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A strong motivation

The impulse for implementing ISO 50001 was given in April 2014, with a view to achieving certification by December of the same year. Seven to eight months is a relatively short time when you know that a certification process takes about 12 months to complete. The project, however, was part of a continual improvement process consistent with Crédit Agricole Group's corporate social responsibility (CSR) approach, which facilitated its implementation.

Thus far, the scope of the ISO 50001 certification includes two sites that house the Group's employees in the Paris area :

- The 8 ha “ Evergreen ” campus in Montrouge, which accommodates Crédit Agricole S.A. and a number of its subsidiaries, was certified in 2011 to “ NF HQETM Bâtiments Tertiaires en Exploitation ”, a French environmental quality standard for office buildings in operation. This certification recognizes buildings that comply with current best practice in terms of environmental and energy performance.
- The “ Greenfield ” site, one of the Group's two data centres, established in 2011 near Chartres, which centralizes the Group's major computer systems.

CA Immobilier has been committed to environmental certification for many years. The company defines the energy profiles of its buildings in the design phase, endorsed by certifications such as HQE Construction/Renovation and BREEAM that give companies the leeway to pursue sustainable performance objectives while performing a life-cycle assessment of their buildings. At the operating phase, the company then takes its commitment a step further by seeking certification to ISO 14001 and/or HQE Exploitation. These energy audits are a way of remaining ahead of the curve when it comes to regulation.

Next logical step

CA Immobilier had already earned other certifications, such as the HQE Exploitation certification of its Evergreen campus in Montrouge, where it got a “ high performance ” (highest level) rating for its “ energy ” target. As for the data centres, they are “ Tier 4 ” certified, which guarantees the highest availability (i.e. 99.99 %) of the company's IT services. This category of data centre is fully redundant in terms of electrical circuits, cooling and network, which means it can overcome the worst technical failures without causing any disruption to the existing servers' availability.



Photo : CA Immobilier

With structured processes already in place, CA Immobilier could draw on the work initiated several months earlier for the implementation of its ISO 50001 certification. The “ Project Mode ” was adopted with all its stakeholders, employees and service providers, and experts were appointed to drive operations in targeted areas, especially with regard to energy-related aspects.

Beyond expectations

Initially, the objective was to reduce energy consumption by 15 % over the 2011-2014 period in all office blocks managed by CAI and occupied by employees of Crédit Agricole S.A. and its subsidiaries in the Paris area.

This required efficient organization. The rigorous processes of ISO 50001 helped manage and control energy use and, soon, the company was in a position to seek certification. The combined use of ISO 50001 and other certifications meant the company not only met these targets, it exceeded them, reducing energy consumption by 19 %, the equivalent of a 316 tonne reduction in CO₂ and a 4 % decrease in total emissions for the two buildings.

Rising to the challenge

Integrating ISO 50001 involved defining the roles of the various stakeholders – operational site managers, persons in charge of energy issues on site, as well as external service providers – and identifying and approving the decisional flow and process before the action plans could be deployed in the “ Do ” phase.

ISO 50001 helped pinpoint where the management system needed tweaking, and a tender was called for a new multi-technical service provider that would guide the company in its implementation efforts. This led to ISO 50001 monitoring being included in the multi-technical maintenance contract, with a more stringent bonus/malus system than the previous contract.

A two-phase integration

For CA Immobilier, sustainable development is more than a guiding principle; it is the blueprint of the real-estate model of the future. Since achieving ISO 14001 certification in 2007, the company has integrated sustainable development into all of its processes.

That said, the year ISO 50001 was implemented, it was important to distinguish energy management from other management systems – ISO 9001 (quality management), ISO 14001 (environmental management) and social responsibility, as the time frame was too short for their simultaneous implementation. Then in 2015, ISO 50001 was integrated to these management systems with action plans that were specific to the standard and a special focus on extending the certification to other sites. The aim today is to have one audit for all the certifications.

Energy management for all

Building on its successes, CA Immobilier is thinking of extending the ISO 50001 certification to all its real estate, albeit with a different time frame depending on the readiness of each site. Going forward, each property within the portfolio will be examined on a case-by-case basis, as the approach taken will very much depend on the users of each site. Each will be offered an option for certification that meets their long-term real-estate plan, their CSR policy, and the strategy of their senior management. ■

About the company

As the specialist real-estate subsidiary of Crédit Agricole Group, a French banking and insurance conglomerate, Crédit Agricole Immobilier manages the office blocks housing the 750 employees of Crédit Agricole S.A. and its subsidiaries in Île-de-France – a portfolio of 51 buildings equivalent to 450 000 m² of office space. At the end of 2014, 29 % of that floor space had received environmental certification, making Crédit Agricole Group the leading investor in renewable energy projects in France.

Evergreen, the head office of Crédit Agricole S.A., achieved an 11 % reduction in energy consumption.



Photo : CA Immobilier

Boosting energy efficiency of buildings

As part of worldwide efforts to keep global temperatures from rising, sector-specific solutions are being developed that offer low-carbon solutions.

Enter the building sector, potentially offering low-hanging fruit for greenhouse gas emissions reduction and job creation across the globe. Since buildings burn 40% of all the energy consumed, designing new buildings or retrofitting existing ones could help meet the climate targets. Helping to decarbonize the building sector is the goal of the new holistic approach being developed by the ISO joint working group for the energy performance of buildings (EPB) – an approach which reconciles climate and energy needs. And with the future ISO 52000 series of standards under development, the building industry

is expected to be much better positioned to attain energy efficiency improvements with the best available technology and practice. That's because solutions that improve energy efficiency often usher in new ways to enhance operational efficacy and drive innovation. So, what does this mean in practical, concrete terms? We decided to ask Dick van Dijk and Prof. Essam E. Khalil, Co-Convenors of the ISO joint working group *Energy performance using holistic approach* for their vision of the building industry's role in helping to build a low-carbon future.

How is maximum efficiency addressed by the holistic approach for the energy performance of buildings (EPB)?

In the past, energy performance requirements were set at component level – minimum thermal insulation levels and minimum efficiencies of products. This, however, leads to sub-optimal solutions and creates a barrier to the necessary technology transitions.

The holistic approach to assessing the overall energy performance of buildings and the built environment, provided by the set of EPB standards (the ISO 52000 series of standards), is a key tool to overcome these barriers.

I want to use effective and inexpensive energy efficiency solutions. What will the future ISO 52000 series of standards mean for me?

The ISO 52000 series of standards will enable to assess the overall energy performance of a building. This means that any combination of technologies can be used to reach the intended energy performance level, at the lowest cost.

Due to this “competition” between different technologies, the holistic approach is a key driver for technological innovation and change. Countries using the approach for several years – take, for instance, the Netherlands – have experienced large-scale implementation and cost savings on a variety of new technologies. This includes thermal insulation concepts, windows, heating, cooling, lighting, ventilation or domestic hot-water systems, building automation and control, and renewable energy sources.

Energy expenditures account for around 40 % of a building's total operating costs.

Who are the potential users of the ISO 52000 set of standards, and what should they be aware of?

The energy assessment of buildings is carried out for various purposes, such as :

- Judging compliance with building regulations expressed in terms of limited energy use or a related quantity
- Increasing transparency in real-estate transactions through an energy performance certification and/or display of the level of energy
- Monitoring the energy efficiency of the building and its technical building systems
- Helping to plan retrofit measures through predicting energy savings that would result from various actions

In general, the holistic approach means that the energy performance is assessed as the total energy used for heating, cooling, lighting, ventilation, domestic hot water, and, in some cases, appliances. ■

ISO 52000 will enable to assess the overall energy performance of a building.

