



UN Global Compact Communication on Progress 2014

Successful Together



Communication on Progress 2014 – Table of Contents

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2004 – 2014: Ten years of supporting Global Compact



As of November 2014, KARL STORZ has been participating in the United Nations Global Compact for ten years. This anniversary gives us the opportunity to review our participation in the Global Compact. I looked back on these ten years and reflected on the benefits of having participated in the Global Compact; naturally, I could think of many positive aspect, but the two I personally value above all others are **sensitization & transparency**.

Sensitization particularly involves the internal process of a company and its employees becoming aware that entrepreneurial actions not only influence the economy and the markets but that companies and all stake-holders within them have the positive “power” as well as the duty to consider humanitarian, social, and sustainability issues in their daily business operations. As a family business, we were aware of this responsibility before ever joining the Global Compact, but our participation placed an even greater focus on this

topic in our internal processes. And it has become even easier for us to point out this commitment to our employees, partners, and the public – and to ask for their support.

The Global Compact has also helped us to regularly research topics, document progress, and increase transparency through internal and external communication. Over the past nine progress reports, the following focus areas have developed, in which we have achieved sustainable progress:

- Improving health care by regularly supporting medical training and education programs
- Supporting educational initiatives for children and adolescents
- Evaluating and carefully monitoring paper consumption and taking actions to reduce the use of paper
- Analyzing fuel consumption and CO₂ emissions
- Sensitizing on issues of corruption and taking measures to ensure and promote anti-corruption efforts

In the tenth year of our Global Compact participation, we of course focused again on the above topics. The following report details our efforts. In particular, I would like to highlight the three medical training programs we support in Africa and Central Asia. The dedication of the doctors on the ground merits particular respect and motivates us to provide long-term support for such initiatives. In the area of environmental protection, we have achieved further reductions in paper use and fuel consumption. This year’s anti-corruption milestone is the generation and distribution of a global compliance code of conduct.

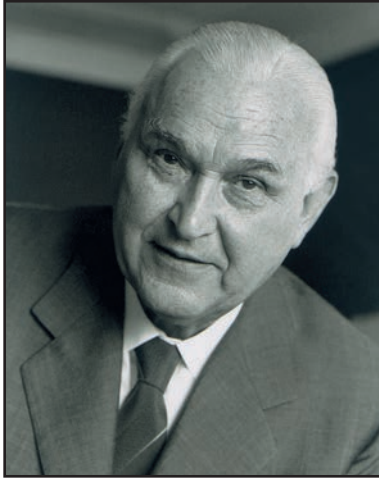
The efforts we make to support the goals of the Global Compact certainly benefit our company, its management, and our employees every year. Therefore, we want to continue our commitment to the Global Compact’s Ten Principles and in so doing, focus on acting consciously and transparently – both internally and externally – for the years to come as well.

Dr. h. c. mult. Sybill Storz

Managing Partner of KARL STORZ GmbH & Co. KG

Tuttlingen, December 30th, 2014

KARL STORZ Endoskope – The Path to Gentle Surgeries



The breakthrough of minimally invasive surgery

In 1945, Dr. med. h. c. Karl Storz founded this family business, which is named after its founder. Ever since the company's early day, he strived to tailor medical products to the exact wishes and needs of the doctors who use them by directly collaborating with physicians.

In nearly 70 years, the former two-person enterprise has developed into a globally active company with a worldwide presence. Everyday, our 6,700 employees enable KARL STORZ to implement new products and innovative ideas to support physicians.

The company continues to greatly value collaboration with physicians and leading research institutions as we did in the early years, so that we are constantly aware of the newest developments in medical technology.

In 1965, Dr. Storz collaborated with Prof. Hopkins to develop the powerful HOPKINS® rod lens system. The new technology delivered previously unimaginable image quality in terms of light intensity, depth of field, contrast, and resolution. About 20 years later, advancements in camera technology permitted the display of the surgical site on a monitor, so that the physician now uses a monitor rather than an eyepiece to view the inside of the patient's body. This advancement has promoted ergonomics in the operating room and significantly has improved the training of young physicians, since they can now better observe surgical procedures.

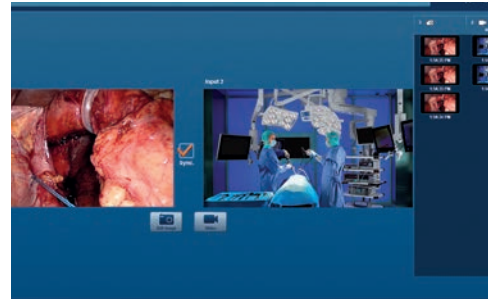
Today's minimally invasive surgery makes procedures much less physically traumatic and thereby contributes to reducing fear and worry about necessary medical procedures. The incisions, which are often only a few millimeters long, reduce wound pain and wound healing problems and additionally contribute to much better cosmetic results – permanent scars are reduced to a minimum. In addition, faster healing reduces hospital stays.

Innovative system supplier

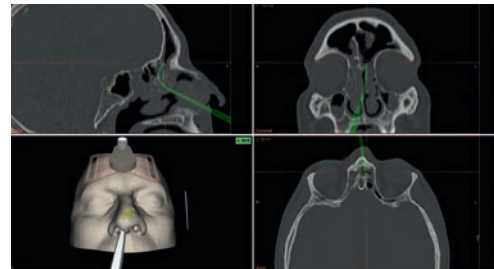
KARL STORZ is a successful full-range supplier, offering a product range that easily combines innovative instruments and devices with system solutions. The company presents workflow solutions that reflect the full range of medical services. KARL STORZ demonstrates its expertise as a system partner with the integrated treatment concept OFFICE1 for diagnostic workplaces, the integrated operating room concept OR1™, and the comprehensive OR management module ORchestrion® that is designed to optimize all processes and resources involved in surgery.

In 2013, KARL STORZ presented the newest development in endoscopic imaging with the modular camera platform IMAGE 1 SPIES™. Surgeons particularly benefit from the innovative SPIES™ modes, which offer an excellent view in any situation thanks to flexible illumination, contrast adjustment, and specific color shifting. IMAGE 1 SPIES™ offers users maximum convenience and support through brilliant FULL HD images, innovative SPIES™ technology, and a clear and helpful menu structure. In 2014, this modular camera platform was expanded by a 3D FULL HD module that offers spatial vision to users performing particularly demanding activities such as suturing.

To further optimize the workflow in the operating room and ensure quality, the company launched in 2014 a new generation of the documentation system KARL STORZ AIDA® in order to fulfill the increasing documentation requirements of hospitals and patients. During the procedure, images and videos are already centrally recorded and saved in HD or 3D HD quality via a touch screen from the sterile area. As another important functionality, the processing of so-called checklists was integrated in the system to help users consciously carry out and verifiably document critical steps. Through central interfaces at the hospital, the data are directly stored under the respective patient in the central hospital information system (HIS) and can be accessed any time via the patient identification number. This enables the surgeon to quickly and efficiently create a patient or surgery report with meaningful intraoperative pictures. Patients also benefit from the complete and transparent documentation of every procedure.



Another innovation launched 2014 was the NAV1 electromagnetic navigation system. Navigation technology has become firmly established in the endoscopic treatment of paranasal sinus disorders. Using a navigation system, surgeons can compare the endoscopic view of findings and their anatomic interpretation with the radiology data and instrument position displayed by the navigation system. Navigation is intended to shorten the duration of surgery and reduce complications.



Prospects for the future

The development of minimally invasive surgery is linked inextricably with the name KARL STORZ. Today, our product portfolio contains over 15,000 products for 22 medical disciplines. Nevertheless, the family-run business does not rest on its laurels but is always on the lookout for innovative improvement and solution options. Our motivation can be described with a quote from Hippocrates: "Healing is a matter of time, but it is sometimes also a matter of opportunity."

Dr. h. c. mult. Sybill Storz, Managing Partner and daughter of Karl Storz, thinks that the potential of minimally invasive surgery has still not been exhausted by a long way. "Operating techniques that place less strain on the patient will continue to develop and give rise to new methods and areas of application." With entrepreneurial foresight, a good instinct for future trends, highly specialized employees, and innovative ideas, KARL STORZ plans to continue to develop products that will make new treatment options possible and make endoscopy even less invasive and even safer.



Implementation of the Ten Principles at KARL STORZ

Global Compact Principles 1-2: Human Rights

Businesses should support and respect the protection of internationally proclaimed human rights; and make sure that they are not complicit in human rights abuses.

Every year, KARL STORZ aims to not only theoretically respect and support human rights, but to apply this idea to the specific business context.

For KARL STORZ, respecting human rights also means explicitly promoting projects focusing on human dignity within and outside of the company's core business. On the basis of this fundamental principle, KARL STORZ again provided sustainable support this year. On the side we supported projects dedicated to medical education and training and on the other side we focused on supporting projects that specifically assist people in less privileged situations or that help others to help themselves.

I. Eritrean cooperation project in anesthesia care

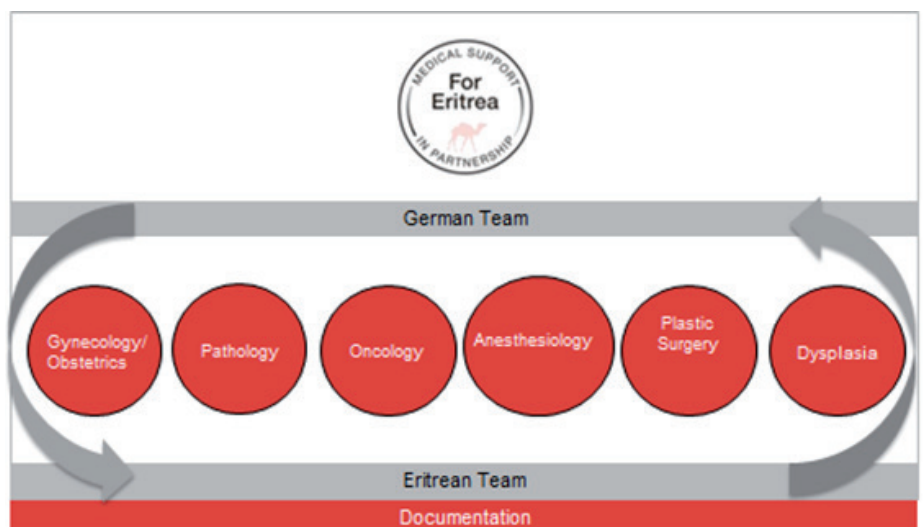


In 2014, cooperation with the initiative “For Eritrea – Medical Support in Partnership” was intensified – especially in the field of anesthesia. Under the project leadership of the specialist Dr. Ulf Bauer (Hamburg), German and Eritrean partners develop concepts to support the on-site training of young physicians. This includes, for example, providing training in specific surgical procedures as well as support during the introduction of new medical equipment.

The initiative, like all their other projects, focuses on providing healthcare to women and mothers.

The project “For Eritrea – Medical Support in Partnership” focuses on the following specialties:

- Obstetrics & Gynecology
- Pathology
- Oncology
- Anesthesiology
- Plastic Surgery
- Dysplasia



Initial situation in the field of anesthesia

In Europe and the US, video assisted laryngoscopy (VAL) has become the method of choice for managing unexpected difficult airway scenarios (difficult airway management). An advantage of this method lies in the magnified viewing of the intubation procedure on a monitor, which also makes the method valuable in training situations.

In Eritrea, no structured anesthesiology specialist programs are currently in place; therefore, anesthetic tasks are largely performed by nurse anesthetists. To standardize training, a curriculum for a Bachelor/ Master program was now established at the Asmara College of Health Sciences.

The products available on the market for difficult airway management feature a robust design since they are often used in prehospital emergency care. This robust technology and ease of use were considered important prerequisites for introducing these high-tech products at Eritrean hospitals.

Scope of the project

- Supply of three KARL STORZ video laryngoscopes (C-MAC®)
- Introduction of the 1st system (donated by KARL STORZ) in March 2014 by Dr. med. Jörg Kampen (“Anesthesia” project leader of the Initiative “For Eritrea-Medical Support in Partnership”) in collaboration with Prof. Dr. med. Waltraud Elsholz (Head, Department of Anaesthesia, Asmara College of Health Sciences)
- On-site training of about 40 participants by the Asmara College of Health Sciences using the training model; KARL STORZ staff members supported the workshop as regards care and cleaning of the equipment
- Follow-up and evaluation after six months’ use by the German “For Eritrea” anesthesia team (Dr. med. Jörg Kampen)
- Handover of two additional C-MAC® units due to demonstrated need and following verification of safe use by the Eritrean anesthesia team. Partially funded by “Eritreische Hilfswerk e.V” [Eritrean relief organization] (president Martin Zimmerman) and in part donated by KARL STORZ in October and November 2014
- Use of the units at the Gynecology and ENT departments of Orotta National Referral Hospital (Asmara) as well as at Halibeth Hospital (Asmara), primarily for treating emergencies and patients with burns
- In the future, clinical use will continue to be documented (case reporting protocol) by the participating hospitals (Prof. Dr. med. Waltraud Elsholz)
- Definition and conduct of a study at the Asmara College of Health Sciences to evaluate the benefits of integrating video-assisted laryngoscopy into postgraduate training (Prof. Dr. med. Waltraud Elsholz)
- Ongoing exchange between German and Eritrean colleagues

Outlook & challenges – anesthesia project

- Maintenance of the devices’ technical readiness for use
- Holding of clinical workshops on difficult airway management
- Support of Eritrean studies and publications on VAL

Outlook & challenges – initiative “For Eritrea – Medical Support in Partnership”

In close cooperation with the Ministry of Education, the Orotta Medical School, the Ministry of Health, and the Asmara College of Health Sciences (Eritrea), a sustainable training program in Obstetrics and Gynecology for specialists, midwives, and nurses will be continued and intensified in 2015 under the expert consultation of Professor Dr. Michael Runge, Collaborating Center for Postgraduate Training and Research in Reproductive Health, Freiburg University Medical Center (<http://www.collaboratingcenterobgyn.org/>).

Yosef Tewolde, M.D. - Head of Surgery, Orotta Hospital, Asmara, Eritrea

“Difficult intubation has become that simple and safe now that perhaps even I could do it!”

Joseph Bouchrouche – KARL STORZ Marketing Specialist ENT, Anesthesia and Neuroendoscopy – Sub-Saharan Africa & Maghreb

“We were happy to support the “For Eritrea” mission conducted in Asmara by Pr. Elsholz, Dr. Bauer and their accompanying team from Germany. With the lack of anaesthetists in the country, the challenge was to train nurse anesthetists and technicians on practises to overcome challenging situations during intubation. Our company had supported the mission by donating C-MAC videolaryngoscopes and I had made the trip to bring technical support during the teaching and training sessions conducted by the German visiting team.

As company, such missions and targeted donations are part of our corporate philosophy. As employees, we are proud to be part of the global effort in bringing our contribution for sustained efforts in education and training.”

For additional information on the initiative “For Eritrea – Medical Support in Partnership”, please visit www.for-eritrea.org (email contact: dr.ulf-bauer@t-online.de).

II. World Gastroenterology Organisation – Support of medical training centers in Sub-Saharan Africa

Guest Author: Desmond Leddin MB, FRCPC, FRCPI
Professor of Medicine (Gastroenterology), Dalhousie University, Canada,
Director of Training Centers, World Gastroenterology Organization

The mission of the World Gastroenterology Organization (WGO) is the improvement of standards in gastroenterology training and education on a global scale. The WGO achieves this by working with health care providers in the developing, and developed, world to train physicians, nurses and technicians. Training is generally carried out in the provider’s home country although there is some opportunity for travel fellowships.

There are currently seventeen training centers globally and several more agreements are nearing completion. The WGO strives to partner with national organizations, universities and philanthropic groups to foster the development of centers. The centers serve as sites for individual and group learning and, increasingly, as sites for dissemination of training in the host country.

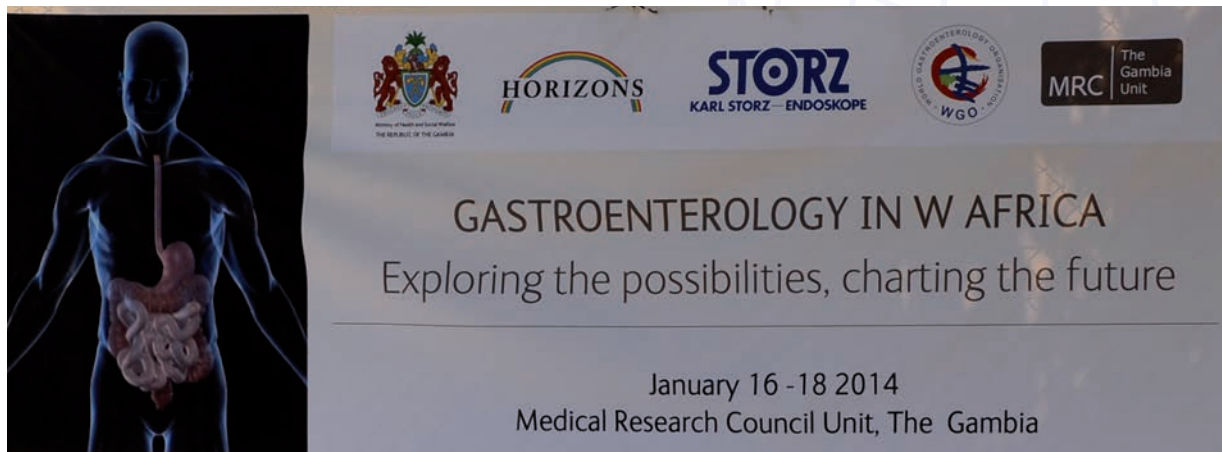


The WGO was very pleased to partner with KARL STORZ in the development of three training centers in Africa. The WGO had centers in Morocco, Egypt and South Africa but none in the remainder of the continent. This was obviously a major concern given the morbidity and mortality from gastrointestinal disease in sub-Saharan Africa. KARL STORZ provided financial support to the WGO, endoscopic equipment to allow three units to be established and, very importantly, the expertise of their team, which covers Africa. KARL STORZ contacts, and on the ground knowledge, was critical in building the relationships, which have resulted in the successful establishment of two centers and the near completion of a third.

In Ethiopia STORZ equipment and expertise facilitated the establishment of a WGO training center in Addis Ababa. This center involved a partnership between the WGO, the University of Toronto, the Ethiopian Society of Gastroenterology and KARL STORZ. It will be inaugurated in April 2015, is already showing signs of being a local leader and is networking with other hospitals in the region.

The center in Lagos, at the Lagos University Teaching Hospital, will also be inaugurated in April 2015. The first center of its kind in Nigeria it will have a major impact in the training of health care providers in the region.

The third center, in The Gambia, is further from completion. The challenges in The Gambia are different from Ethiopia or Nigeria. The population is small and expertise in gastrointestinal health, though excellent, is very short of trained personnel. KARL STORZ provided equipment, technical support, and financial support for faculty for the first ever West Africa endoscopy meeting which was held in Banjul in January 2014 at the UK Medical Research Council facility in The Gambia. We also partnered with Horizons Medical Trust (UK) on the event. The meeting attracted nurses and physicians from Senegal, Mauritania and Nigeria. Faculty came from the UK, Canada, USA, South Africa and The Gambia. Evaluations were extremely positive of this live endoscopy, interactive, and hands on event. A follow up meeting scheduled for January 2015, again with KARL STORZ sponsorship, unfortunately has been postponed due to the Ebola crisis. The objective of that meeting will be the introduction of therapeutic endoscopy and we will also begin to explore issues around end of life care and palliation.



The impact of the KARL STORZ gift of human, financial and technical support has been very significant. The three centers established as a result of the gift will continue to produce health care providers and will have an impact on patient care in the region. It has also encouraged other companies and providers to engage so that in the space of a relatively few years the WGO will have gone from having no training centers in sub Saharan Africa to potentially partnering with six centers in the near future. KARL STORZ' leadership has been invaluable and is much appreciated by the global community.

Desmond Leddin, December 2014

III. Efficient usage of modern medical equipment – Cooperation with GIZ in Uzbekistan

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) the German GIZ (Gesellschaft für internationale Zusammenarbeit GmbH) conducts in cooperation with the Ministry of Health of the Republic of Uzbekistan the project “**Advanced Training of Doctors and Medical Staff to Work on Modern High-Tech Medical Equipment in Uzbekistan**”

Starting point of this project

The Uzbek health system disposes of a certain amount of high-tech medical equipment that has been purchased through donor-funded programs. In order to effectively use this modern equipment GIZ and the Uzbek MOH (Ministry of Health) identified the need for capacity building in the following fields:

1. Capacity building of medical and technical professionals in the use of advanced, modern health technology;
2. Quality assurance and management improvement within procurement, logistic and maintenance in the selected clinical areas;
3. Improvement of procurement planning and financing in selected clinical areas,
4. Public-Private-Partnership (PPP) in Centres specialized in advanced training for health professionals and technicians.

The overall goal of the project is: “In selected clinical areas advanced, modern technology is used in a more efficient and effective way”. The selected clinical areas are: (i) imaging systems / CT and MRI Equipment and (ii) Endoscopy equipment / less-invasive surgery. The ultimate beneficiaries are the people of Uzbekistan as well as health professionals using the advanced modern technologies as specified.

Cooperation partner KARL STORZ

Based on the sustainable concept of this training initiative KARL STORZ was very happy to participate in this project as cooperation partner. Therefore KARL STORZ supported this project in the years 2013 and 2014 as follows:

- Support of 6 Uzbek senior physicians from the Republican Scientific Center for Emergency Medical Care (RSC EMC) and the Tashkent Institute of Postgraduate Medical Education (TIPME) being trained in Russia (St. Petersburg & Moscow) and France (CICE – Centre International de Chirurgie Endoscopique, Clermont-Ferrand)
- Supporting Russian faculties doing training in Uzbekistan
- Provision of equipment for laparoscopy working stations



Training of senior physician in CICE – Centre International de Chirurgie Endoscopique, France



Employee of KARL STORZ explains the functionality of the laparoscopic training station in the new established training center of the Republican Scientific Center for Emergency Medical Care



Training “Handling and maintain of laparoscopic equipment” for nurses in the new established training center of Republican Scientific Center for Emergency Medical Care

© Images used by courtesy of GIZ (Gesellschaft für Internationale Zusammenarbeit GmbH)

Dr. Utkir Aripov – Trainer from Republican Scientific Centre for Emergency Medicine

“The study findings confirm the effectiveness of teaching laparoscopic technique basic skills using KARL STORZ simulators and mannequins. The evidence demonstrates that the skills learned by novices during these trainings in endo-surgery has successfully been transferred and implemented into practice.”

Dr. Avlod Khakimov – Trainer from Tashkent Institute for Postgraduate Education of Doctors

“Events and training courses on the project influenced us positively. ... We believe that it is necessary to achieve in Uzbekistan because soon the vast majority of interventions for surgical pathology will be performed in minimally invasive way.”

Dr. Akilov Khabibulla – Vice-Rector of the Tashkent Institute for Postgraduate Education of Doctors

“As a practical surgeon I have mastered the operation nephrectomy, splenectomy, intracorporeal suture technique, a number of gynaecological operations. Being pro-rector of the Tashkent Institute for Postgraduate Education of Doctors in charge of the educational process familiarized with the principles of the organization of such a centre, distance education; conduct transactions online communication with an audience of students. All this, of course, will have application in the organization of a joint training center in Tashkent, with the participation of GIZ and KARL STORZ. I would like to express my sincere gratitude to the GIZ and KARL STORZ, and look forward to further close cooperation in the field of postgraduate education.”

IV. Employee solidarity

KARL STORZ employees support the Tuttlingen Hospice Group [Hospizgruppe Tuttlingen]

This year, the company sports group KARL STORZ Aktiv once again organized two large sports events and invited employees and business partners from near and far. The 21st international KARL STORZ sports event held in April at the Mühlau gymnasium (indoor soccer and volleyball) and the 27th KARL STORZ soccer tournament held in Liptingen in July were highly successful; the events are all about enjoying sports and spending fun times with colleagues.

Since 2004, KARL STORZ Aktiv has also upheld a tradition of donating the net proceeds of these sports events to a social aid facility located in the region. Thanks to our employees' generosity, EUR 5000 were donated to the Tuttlingen Hospice Group.

The Tuttlingen Hospice Group provides volunteer, non-denominational support to severely ill and dying people as well as to their loved ones.



Presentation of the donation to the Tuttlingen Hospice Group

V. Promoting the talents of children and adolescents

Sponsor of the regional “Jugend forscht” [youth research] competition



“Jugend forscht” is Germany’s best-known competition for young scientists. It aims to raise adolescents’ interest in mathematics, IT, natural sciences, and technology as well as to discover and nurture young talent. Nationwide, more than 100 regional competitions are held each year. Participants range in age from 4th grade through age 21. (Source: <http://www.jugend-forscht.de/>)

“Looking for the researchers of tomorrow” was the motto of the first Jugend forscht event in 1965, initiated by the publisher Henri Nannen. In 2015, the Donau-Hegau regional competition will be held in Tuttlingen for the second time. The company KARL STORZ and the City of Tuttlingen sponsor the Donau-Hegau regional competition.

“Time for the next round!” is the motto of the 2015 “Jugend forscht” youth research competition. The 1st Donau-Hegau regional competition held in February 2014, which included 77 young researchers, was a great success. The next regional competition will again be organized by the sponsors KARL STORZ and City of Tuttlingen and held at the KARL STORZ visitor center. For 2015, we expect a total of 100 participants, who will present 53 projects in seven areas (as of 12/8/2014).



Dr. h. c. mult. Sybill Storz, Managing Partner of KARL STORZ GmbH & Co. KG

"As a company, securing future success by promoting the talents of the next generation is important. There is no future without today's young people! Those who want to be ready for the future therefore invest in the young. Our youth has unprecedented ideas, impressive talent, and great curiosity. KARL STORZ is happy to provide children and adolescents with a platform where they can test and prove themselves."

Michael Beck, Mayor of Tuttlingen

"We want to turn last year's Jugend forscht competition into a tradition; the excitement the event generated in 2014 motivates all of us. I was inspired by the participants' projects and ideas. As a global center of medical technology, our city particularly depends on the talents of young people."

In addition to benefiting from the experience of having participated in Jugend forscht, young researchers gain skills that will be great assets in their future. Student participants from 2014 believe that Jugend forscht will affect their future in various ways:

Students Ruben Bauer & Christoph Moser – who reached the 2014 national competition:

"To us, Jugend forscht was much more than just a ranking of our project. The judging and feedback conversations also nurtured skills unrelated to our project, such as presentation skills and the ability to handle criticism."

"A major reason for me to participate was having the opportunity to pursue my interests and create a specific project in the process."

Student Dominik Albrecht – who reached the 2014 state competition:

"Without Jugend forscht, I would not have even started a project. Jugend forscht promotes talent and helps young people to discover their personal talents."

Support of the Tuttlingen student calendar [Tuttlinger Schülertimer]

Since 2003, KARL STORZ has been supporting this project, in which students research topics for a student calendar, write texts, and design the calendar under the leadership of the City of Tuttlingen and the Youth Culture Center.



Presentation of the 2014 student calendar (© City of Tuttlingen)

In 2014, the 40 participating students from seven Tuttlingen schools chose the calendar topic “tolerance”. Independently designing the calendar particularly stimulates students’ creativity and increases their media competence. Since KARL STORZ paid for the printing costs, the student calendar could again be distributed free of charge to interested children and adolescents this year.

VI. Donation of medical technology products for sustainable development

This year, KARL STORZ once again supported numerous medical aid projects in various countries worldwide. These projects focus on treating patients in need as well as on the sustainable component of training local physicians and nurses in endoscopic methods. KARL STORZ contributes by donating endoscopic products that are then used by experienced physicians on site. Afterwards the products are donated to local staff following medical training.

In 2014, we supported projects in the following countries:

- Africa (Urology)
- Bolivia (Bronchoscopy, Laparoscopy)
- Cameroon (ENT, laparoscopy)
- Dominican Republic (Laparoscopy)
- Ecuador (ENT)
- Ethiopia (ENT)
- Gabon (Anesthesia)
- Guyana (Urology)
- Honduras (ENT, Pediatric Neurosurgery, Laparoscopy)
- Kazakhstan (ENT)
- Kenya (Pediatric Surgery)
- Madagascar (Urology)
- Malawi (Gastroenterology)
- Mali (Anesthesia)
- Nicaragua (Gynecology)
- Peru (Gynecology)
- South America (ENT)
- Syria (ENT)
- Tanzania (Laparoscopy)
- Togo (Pediatric Bronchoscopy)
- Tunisia (ENT)
- Uganda (Bronchoscopy, Documentation)
- Ukraine (Surgery, ENT, Pediatric Urology, Laparoscopy)
- Zambia (Urology, ENT)

Support and advancement of medical training in Africa



Arthroscopy Workshop in Maputo, Mosambik
– May 2014



ISGE Workshop Lagos, Nigeria – March 2014

Global Compact Principles 3-6: Labor

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.

As a family business, KARL STORZ consistently strives to design the workplace such that employees can optimally contribute to the company while allowing for personal creativity and creation of meaning. KARL STORZ offers the following volunteer programs to meet our employees' needs:

- Flexible work time models, 12 % of workforce has a part-time contract
- Flexible job reintegration for working mothers
- Financial participation in the company's success
- Voluntary extended benefits
- Support of continued education and professional development

According to a study of the University of Hohenheim published in 2012, women hold less than 20 % of German technical jobs (MINT = mathematics, informatics, natural sciences, and technology).

At KARL STORZ, women represent **37,2 %** (2013: 37,5 %) of workers in manufacturing and **26,4 %** (2013: 29,3 %) of those in Research & Development. The company is happy about this stable and positive conforming result and considers it the result of consistent human resources policies that focus on abilities rather than gender roles.

I. Support of working parents



In 2014, KARL STORZ again increased its long-term commitment to supporting working parents. For the **fifth consecutive year**, KARL STORZ has expanded its cooperation with the local child care facility „Haus der Familie“ [House of Family]. Our commitment has further expanded to a cooperation with two other childcare facilities in Tuttlingen and Neuhausen ob Eck (Tuttlingen county). The KARL STORZ family company has now reserved a total of 20 child care spots for use by employees with young children. The cost of care is shared by company and parents.

Overview of childcare spots – development since 2009

	Total number	Full-day spots	Half-day spots
2009	8	--	--
2010	10	--	--
2011	12	10	2
2012	14	13	1
2013	19	16	3
2014	20	15	5

II. Support of education and apprenticeship training

Following up on our 2011 Progress Report, we want to highlight our efforts in the area of education and apprenticeship training. We are happy to report that except for one program, we have been able to successfully continue all initiatives.

Training and university studies at KARL STORZ



Employees are a company's most important resource. Therefore, KARL STORZ places great value on young people receiving a solid education today, as they are tomorrow's qualified employees. **In 2014, we hired 40 trainees and 20 university students** who are enrolled in a practice-oriented program at the Baden-Württemberg Cooperative State University (DHBW). In addition, 40 trainees and students successfully completed their training or university degree and **100 %** of them remained at KARL STORZ with an unlimited employment. Currently, there are a total of **174 young people who are in training or enrolled in university studies**.

Since 2006, KARL STORZ has also been inviting interested parents of first-year apprentices. At an afternoon event, the parents receive a company tour and the opportunity to talk with representatives of the Human Resources department.

Trainee exchange with supplier

To promote the professional qualification and the exchange of experience of our trainees, we established an exchange program with a local supplier since 2009. The industrial apprentices in both companies spend 2 months at the other company on an exchange basis to learn new processes and skills. The exchange especially expands the apprentices' understanding of processes involving cooperation between companies.

Cooperation without handicaps – one-week internship for trainees at a facility for people with disabilities

In collaboration with an association for people with disabilities, "Lebenshilfe für Menschen mit Behinderungen" [Life Aid for human beings with disabilities], Tuttlingen District Association, KARL STORZ has been offering a one-week internship at Lebenshilfe for trainees in their first year of training through the project "Cooperation without handicaps" since 2003. Beyond professional qualification and the social interaction with coworkers, this project enables trainees and students to learn to interact with other people in our society. In Tuttlingen, Lebenshilfe runs a workshop for people with disabilities, an assisted living facility, and a facility that provides support and care for people with severe disabilities.

Initially, KARL STORZ apprentices and university students attend a local information event followed by a visit of the various departments of Lebenshilfe Tuttlingen. In the subsequent weeks, the apprentices and students have the opportunity to complete a voluntary, one-week internship at Lebenshilfe. Internships can be completed at the workshop, the assisted living facility, or at the care facility. At a final event, the interns then reflect on their experiences and impressions together with the Lebenshilfe employees, and more detailed information about the causes and types of disabilities is discussed. This project benefits both interns and people with disabilities because the personal collaboration and exchange reduces prejudice and makes integration a reality in everyday life.

The management of the family-run company is particularly committed to support people with disabilities and their integration into society. Therefore, we not only support the "Cooperation without handicaps" project but have been placing production orders with the Lebenshilfe workshop for years. The workshop employs people aged 18 to 65 with mental and multiple disabilities. The employees are supported occupationally and also receive personal development opportunities in the form of numerous accompanying programs, such as on numbers and money, cooking and baking as well as through music therapy, etc.

Internship year with technical focus

In cooperation with the local Steinbeis vocational school, we support adolescents who have not found an apprenticeship position to help them get ready to enter the professional world. During the one-year program, participants attend the vocational school three days per week. On the remaining two days of the week, participants work at the KARL STORZ trainee workshop. The project's practice orientation is intended to improve the readiness of participants to enter an apprenticeship program. KARL STORZ actively contributes to the support and development of these students. We aim to offer program participants a regular apprenticeship position. Between 2008 and 2014, we have already been able to provide apprenticeship positions to **nine program participants**.

Educational partnership with local schools

Since 2009, KARL STORZ has been in a cooperation agreement with the Hermann-Hesse-Realschule (intermediate-level secondary school). In 2010, we added an agreement with the Wilhelmschule. Throughout the school year, we conduct joint events such as

- Job internships & tours
- Technology classes at the KARL STORZ trainee workshop
- Applicant training, including a “real” job interview with staff from KARL STORZ Human Resources
- Support of remedial math courses for the specific learning of skills relevant in the professional world
- In-house exhibition, where KARL STORZ trainees present their occupations to the students
- Support of Girl's Day and the Technolino project to offer girls and elementary students playful and age-appropriate insights into technical occupations

III. University cooperation projects

University Campus Tuttlingen

In 2009, the Tuttlingen university campus was established; it is a model institution of higher education that differs from existing universities in terms of trusteeship, organization, and teaching. This idea was developed and implemented with joint commitment of the industry, Tuttlingen city and county, the Furtwangen University of Applied Sciences, and the state of Baden-Württemberg. Tuttlingen now offers a cutting-edge international university based on the public-private partnership model. With its innovative approach, the Tuttlingen university campus aims to recruit additional engineering students.

Offering the five Bachelor programs Automation & Mechatronics, Manufacturing, Materials Engineering, MedTec, and Virtual Engineering and the Master program Mechatronic Systems, the Tuttlingen university campus perfectly responds to the needs of the economy of the region and beyond. During their studies, students already familiarize themselves with the companies, use their laboratories, and develop social networks. The public-private partnership between the regional industry, the city of Tuttlingen, Tuttlingen county, and Furtwangen University of Applied Sciences makes the Tuttlingen campus a novelty in the German university landscape. The Förderverein Hochschulcampus Tuttlingen e.V. [University Campus Tuttlingen Sponsoring Association], whose membership includes more than 100 regional companies, has a voice and decision-making rights regarding the university's teaching. This model concretely implements the companies' demand for practice-oriented university education.

Because we strongly believe in this idea, the company KARL STORZ has been a founding member of the sponsoring association founded in 2009. KARL STORZ and 100 other partners from the association have agreed to support this unique university concept with 2.5 million euro annually for 10 years.

KARL STORZ additionally supports the Tuttlingen university campus as follows:

- **Premium semester:** In 2014, KARL STORZ introduced the “US Premium Semester.” In the context of a competition, university students receive a technical task. The solved task and complete application documents are submitted to and evaluated by KARL STORZ. A student with excellent results and documents is awarded a six-month work experience semester at a KARL STORZ development site in the US (Massachusetts or California). KARL STORZ pays for the travel cost, lodging, and internship pay. This attractive program is intended to particularly promote the professional and personal qualifications of participants through the experience abroad.



- **Freshman meeting:** Introductory event for first-semester students to get to know the company through a presentation and factory tour.
- **Mentoring program:** KARL STORZ employees from R & D, Production, and Product Management serve as mentors to students in their 2nd and 3rd semesters.
- **Internship positions for 6th semester students.**

Award of the Germany Scholarship [DeutschlandSTIPENDIUM]

Through the Germany Scholarship initiative, the federal government and private sponsors support tomorrow's leaders. Together, sponsors want to ensure that top university students reach their full potential and thereby invest in Germany's future.



© Deutschlandstipendium

Until 2017, the project aims to support up to 2 % of students at each German university. Germany's wealth, positive economic development, and innovative strength are primarily the result of the many excellently trained professionals working here. Their extensive knowledge, ideas, and motivation ensure our country's global competitiveness. But we must not rest on our laurels. In view of the demographic changes in Germany and the growing global competition, it is increasingly important to specifically support top talents. (Source: <http://www.deutschland-stipendium.de/de/1748.php>)

KARL STORZ has been supporting this initiative since 2011. In the year 2014, the company grants a total of **eight scholarships** to students at the following universities:

- Since 2011: Charité Berlin (1 scholarship), University of Ulm (2 scholarships)
- Since 2012: Furtwangen University (1 scholarship), Pforzheim University (2 scholarships)
- Since 2013: Reutlingen University (1 scholarship), Regensburg University (1 scholarship)

Support of the “Medical technology” study program cooperatively offered by the universities of Stuttgart and Tübingen

Through the Medical Engineering Foundation [Förderfonds Medizintechnik], various medical device manufacturers are supporting university students, particularly those starting into their first year of studies. Provided they maintain good grades, their scholarship continues for the program's regular study period. Through this program, KARL STORZ has been supporting two students since 2010.

“Endoscopy” lecture series – elective at Furtwangen university

In October 2014, KARL STORZ offered for the first time an elective at Furtwangen university that was open to Medical Engineering students in the 3rd semester or above. In 14 teaching units (1.5 hours each), KARL STORZ product and marketing managers teach the essentials of endoscopy. The lecture series particularly covers the fundamentals of anatomy, indications, methods, and technical instruments. Further teaching units deal with devices, cameras, molecular imaging, integrated operating rooms / OR management, and hygiene. To enhance their new knowledge, students receive hands-on training using endoscopy training stations. At the end of the lecture series, presenters and students discuss professional opportunities in medical technology.

Global Compact Principles 7-9: Environment

Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies.

The sustainable and responsible use of resources is particularly important to KARL STORZ, a globally active company with a long history, and its Managing Partner Dr. h. c. mult. Sybill Storz. As a family company with regional roots, KARL STORZ has been committed to the environmental protection for decades, and the company strives to protect the environment for subsequent generations as well. We believe that environmental protection and economic success are not mutually exclusive. At KARL STORZ, environmental protection and resource conservation are important criteria in business decisions

Manufacturing high-quality, multi-use products and using durable materials achieves long product lifetimes and thereby conserves resources. When developing new products, we place particular value on durability.

I. Redesign of the Dundee subsidiary – focus on the environment

Our production and repair site in Dundee (Scotland) has been located at Ninewells Medical Campus since 1995. Our growth now required a larger and differently designed building. The company decided to continue using the existing building but to make major improvements to its functionality and work environment through an extension and redesign.



New building of the KARL STORZ production site in Dundee, UK (© ISG plc)

The aim of the project was to increase the office space and technical facilities at KARL STORZ' Dundee site. A two storey extension was designed to link to the existing building, which would be refurbished. Environmental protection and improving employee comfort were high priorities in the building redesign.



*Opening and handing over of the new building by the company management
Dr. h. c. mult. Sybill Storz & Karl-Christian Storz (March 2014)*

Passivhaus [Passive House] Guidelines & Sustainability*

The design for the extension followed Passivhaus guidelines which saw heat reclamation and natural ventilation included. The high levels of natural light have allowed the lighting management system to be programmed to switch off the artificial lights during the day. This has been supplemented by the installation of high frequency, low energy, high efficiency lamps and LED lamps sources with extensive switch control via PIR sensors.

Within the mechanical boiler room two high efficiency gas fired boilers were installed and variable speed energy efficient circulation pumps were installed on the heating VT circuit. The heating systems are weather compensated and timed controlled to suit the building occupancy.

The U values (heat transmission coefficient) of the building are 0.15 or less. Subsequently solar photovoltaic units have been installed onto the roof of the extension.

A sedum roof was installed on part of the extension, consisting of insulation, matting, drainage materials and a layer of sedum turf. A wildflower garden was created at the rear of the building. The top soil from the excavation period was spread out over the grounds of the rear of the property, removing the need to transport it from site. This reduced the carbon footprint of the building.

Rather than being demolished the existing building was refurbished to provide storage and workshop facilities. The original building was gutted internally and refurbished. The windows were replaced and insulation installed into the attic space.

** (Text and images used with courtesy of: ISG plc, Glasgow)*

Energy consumption

KARL STORZ Endoscopy (UK) Ltd operates an Environment Management System that is certified to the internationally recognized Environmental Management Standard – BS EN ISO 14001:2004. In 2014 they have targeted establishing an accurate and verifiable baseline for future monitoring and benchmarking purposes. Monthly energy readings are now being collected at Dundee sites. The company's CO₂ program facilitates the calculation of both CO₂e data and energy consumption data. Key Performance Indicators (KPIs) have been established to monitor and measure energy consumption and are reviewed on a regular basis by senior management.

Improved Workplace

The extension has been designed to provide light and spacious office accommodation for staff. Previously staff were separated into different rooms which limited interaction. The new space provides open plan accommodation which facilitates an integrated approach between departments. Staff have benefited from an improved occupier density and improved facilities.

A board room with video conference (VC) facilities was created, providing an invaluable resource for a company with a global network of offices and a headquarters in Germany. Previously meetings were carried out by teleconference, or staff were required to travel to other offices. The introduction of the VC facilities will allow staff to have more effective meetings and will reduce the requirement for travel, with a direct impact on the company's carbon footprint.



Light and spacious offices (© ISG plc)

The extension also provides modern workshop and laboratory space for the repair of KARL STORZ's products. In order to avoid heavy equipment being carried upstairs the decision was taken to situate all of the technical rooms on the ground floor. Space has been created to allow for the installation of specialist equipment to repair veterinarian endoscopy products, which will create a unique facility within Scotland.



Employees in the technical facility

II. Environmental protection through innovative medical devices

VisitOR1® – an intraoperative telementoring robot conserves resources and creates new opportunities in medical training



The KARL STORZ VisitOR1® is a unique telepresence/ telesurgical robotic device which can be placed in any location within a clinical institution and provide immediate and direct interactions with experts across the globe. With the use of a VisitOR1®, even remote locations have the possibility to access expert advice while saving the resources of traveling far distances. Hospitals can benefit by fully utilizing experts throughout their network thus improving outcomes. The device is unique in that it only requires an internet connection to transmit live images from interventions at a moment's noticed. To utilize the system, a user simply has to login to a secure server and can access the VisitOR1® when required. While logged into the device, both locations connected can be seen and heard. Also, the robotic head unit can be positioned and controlled so as to provide the best unobstructed view. Physicians on the local end can send simultaneous video signals from both the exterior and endoscopic views in order to provide a clear representation of the intervention. Since the user in control is interacting directly with the surgical staff, the device is a complete mobile production studio which can record images and videos, telestrate, switch viewable sources, connect to traditional video conference devices, and lastly pinpoint specific locations in the surgical environment by utilizing the built-in laser pointer.

Key Use Cases:

- Physician to Physician Direct Interaction (OR to OR)
- Physician to Department Interaction (OR to Pathology)
- Institution to Service Department (Remote Troubleshooting)
- Patient to Physician (Remote Patient Rounding Capabilities)
- Physician to Group/Institution (Multipresence Telehealth to Lecture Hall)

With this new system KARL STORZ sees great chances in the long run to decisively reduce travel of experts or patients to access experts' knowledge. Furthermore with respect to medical training we see a great opportunity that learning surgeons can get virtually accompanied and guided by experts.



Practical example: “Surgical Telementoring in Pediatric Minimally Invasive Surgery”

“Dr. Steven Rothenberg in Colorado and his former fellow Dr. Todd Ponskey in Ohio, recently performed the first ever telementored thoracoscopic lobectomy on a five-month-old female. Because this infant could not travel, telementoring was arranged to perform a right lower lobectomy of a congenital lung lesion. The surgery, performed in less than two hours, was one of the most complex procedures ever telementored. It not only saved a costly and difficult journey, but also ensured the infant the highest level of expertise available. Dr. Rothenberg helped with pre-operative set-up, positioning, trocar placement, and then guided Dr. Ponskey through the case without complication. According to Dr. Rothenberg, ‘The efficacy of this technique and technology in surgical education is huge.’”

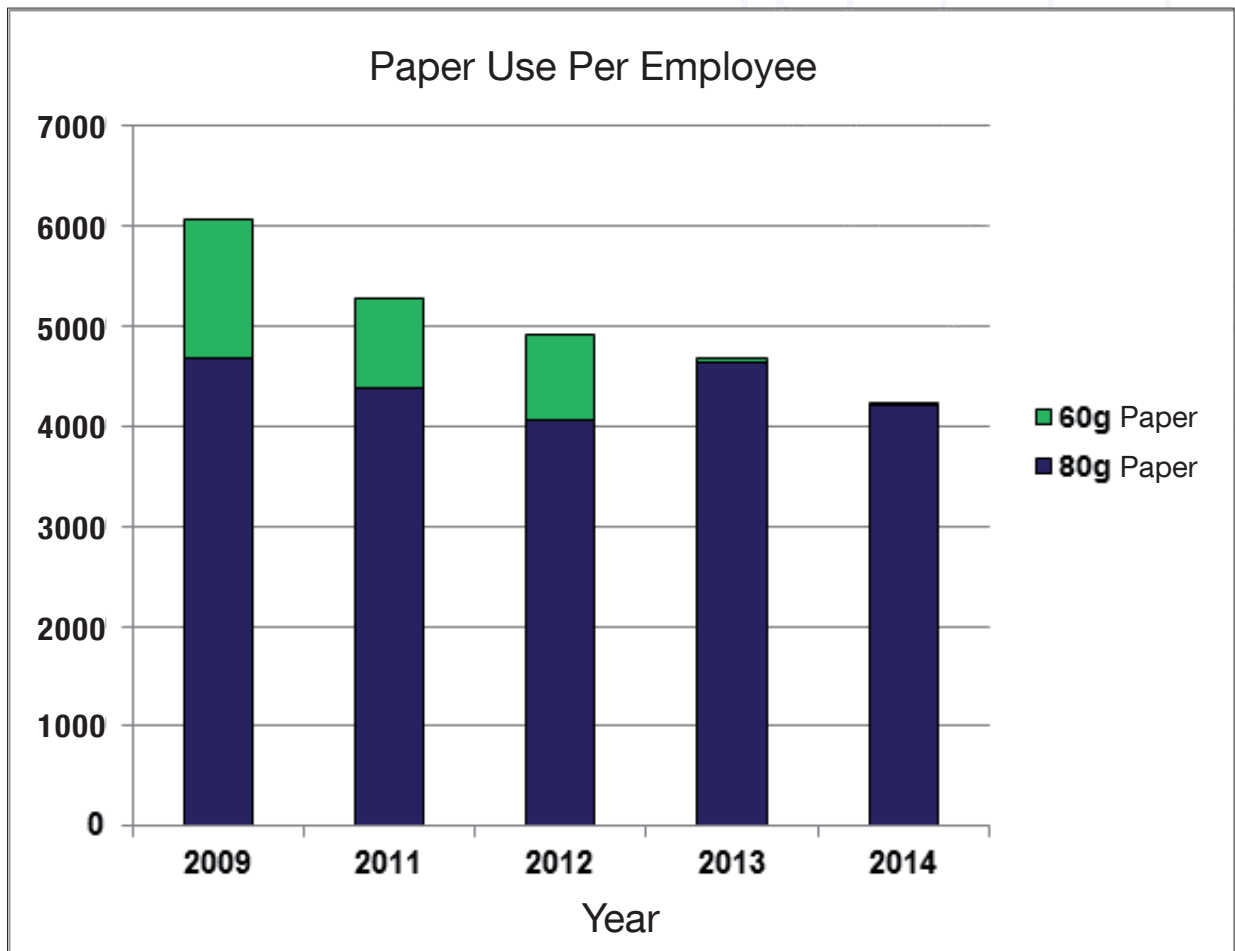
Text Source: Surgical Telementoring News (Volume 1, 2014)

Reusable instrument with knife blade for single use

The reusable bipolar 5 mm grasping forceps ROBI® PLUS were designed with particular attention to safety and user friendliness. This time-saving instrument allows the surgeon to grasp, coagulate, and cut tissue. Existing models only offered coagulation, and tissue could only be cut after switching instruments. In addition, users in veterinary medicine also switched to single use instruments in this application. The KARL STORZ approach of offering a reusable instrument (sheath plus handle) saves resources; only the knife blade is for single use. This system reduces waste, and the exchangeable blade ensures precise cutting every time.



III. Reduced paper use per employee



KARL STORZ pursues the long-term goal of continuously reducing paper use by improving processes and thereby sustainably contributing to resource conservation. In 2014, we successfully continued to reduce our paper consumption – despite our growing staff. On average, each employee used about 4330 sheets of paper, which corresponds to a **reduction by about 9.4 % per employee** (see diagram).



Digital media library on the KARL STORZ website

Digital media library on the KARL STORZ website

With the launch of the new KARL STORZ website in October 2014, the newly designed media library was introduced. Unlike its predecessor, the new website offers users the opportunity to view or digitally download a large variety of product and information brochures. This improves customer service and reduces printing and shipping needs.

Digital media tables at medical congresses

Since 2014 KARL STORZ has been using "media tables" at medical congresses that allow visitors to view KARL STORZ publications in electronic form. They reduce the total need for printed materials as well as the transport volume for the conference booths.

Apprentices get involved in paper reduction

Our apprentices Kristina Weizel and Ramona Weber want to submit a project to the "Klimawerkstatt" (climate workshop) competition. On the basis of a task they received at their vocational school, the trainees brainstormed projects that could help reduce CO₂ emissions at KARL STORZ. While carrying out their practical work at different company departments, the apprentices developed a project idea that involves using a digital form for approvals currently obtained in paper form. Since a similar project has already been initiated on this topic, the apprentices have joined this project team and are contributing their ideas. The results of the project will be presented at the vocational school and possibly at the competition.

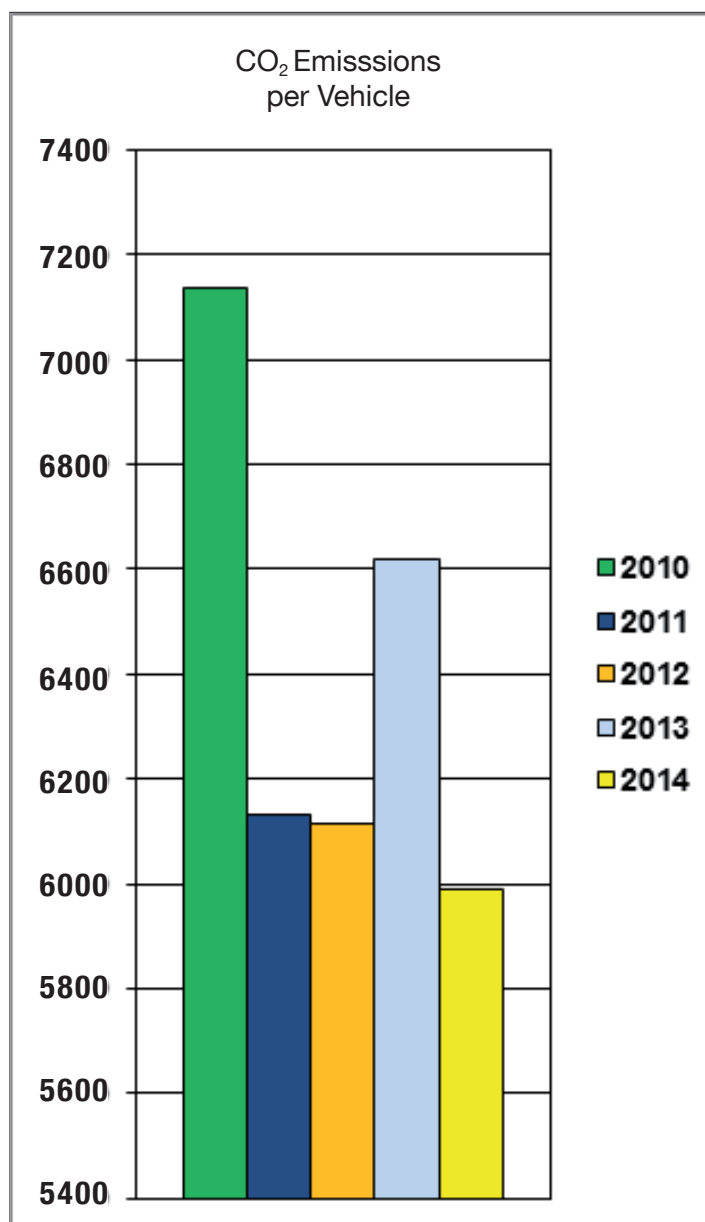
IV. Company fleet: Fuel consumption and CO₂ emissions

Company Fleet	2010	2011	2012	2013	2014
Total kilometers driven	6,494,594	6,256,525	7,051,607	7,127,941	7,085,096
Kilometers driven per vehicle	35,684	30,519	31,340	33,622	30,671
Average fuel consumption (liters / 100 kilometers)	7.63	7.67	7.45	7.51	7.46
Total CO ₂ emissions (2.62 kg/l*)	1,298,955	1,257,333	1,376,070	1,403,128	1,383,900

*Ministry of the Interior of the state of Baden-Württemberg: Average CO₂ emission per liter of diesel: 2.62 kg.

In late 2008, we introduced a fuel card system at our Tuttlingen headquarters that allows us to analyze the fuel consumption of company cars. Thanks to its consistent use in 2012, many more cars could be analyzed than in 2011 – which is the primary reason for the significant increase in driven kilometers, by about 12.71%, to 7.05 million kilometers.

After the number of kilometers driven rose slightly in 2013, a slight decrease was measured again this year, despite the fact that our fleet was expanded. In 2014, an average of 7.46 liters per 100 kilometers (-0.77 %) of fuel was used on a total of 7,085,096 kilometers driven (-0.60 %). The number of driven kilometers per vehicle was reduced by 8.78 % to 30,671 km. The average CO₂ emissions per vehicle even dropped by 9.48 % compared to the previous year (see diagram), in part as a result of using energy-efficient vehicles.



Global Compact Principles 10: Anti-corruption

Businesses should work against corruption in all its forms, including extortion and bribery.

I. Continued dedication with training and information

Transparency statement on the KARL STORZ website

Since October 2014, we have updated the anti-corruption contents on our website to further emphasize the importance of this topic. We bundled contents under the rubric “Compliance”, where we provide details on the anti-corruption guideline, on our general commitment to the Global Compact, and on environmental protection and resource conservation.

Anti-Corruption Guideline



Our emphasis on responsible action calls for transparent and lawful collaboration with sales partners, physicians, medical facilities, and other medical staff following a clear code of conduct.

► Additional information

UN Global Compact



KARL STORZ complies with the Ten Principles of the Global Compact.

► Additional information

Environmental Protection and Resource Conservation



Corporate responsibility in accordance with active environmental protection

► Additional information

Screenshot KARL STORZ Website

For employees and website visitors, we have summarized our related and higher-level guidelines as follows:

“The KARL STORZ family company is committed to legal compliance, honesty, loyalty, transparency, sustainability, and fairness in everyday business operations. These values are not abstract requirements but essential guidelines for our corporate activity. Our company founder, Dr. med. h. c. Karl Storz, already practiced these values and recognized them as the key to long-term, sustainable success. Following laws and company-specific rules and principles of conduct is referred to as “compliance”. To KARL STORZ, this means that each and every employee, all supervisors, and the management board continuously ensure that our business activities are always conducted respecting the law and ethical rules. For this purpose, the company management in Tuttlingen puts in place global compliance standards in the form of a code of conduct and associated guidelines. At our worldwide sites, these standards are bindingly implemented through local instructions or expanded if national law requires.

Throughout recent decades, our company has worked hard to gain an excellent reputation for quality and innovation in endoscopy. Therefore, each and every employee is responsible for maintaining this excellent reputation and for further promoting it through positive action, for strengthening our customers’ confidence placed in us time and again and for safeguarding the company from any illegal or unethical actions. The compliance guidelines created for this purpose offer employees clear orientation, and to our customers and suppliers, they promise partnership in a fair and transparent business process.”

Employee anti-corruption training

In 2014, KARL STORZ again held employee anti-corruption training sessions to specifically inform employees who are in contact with customers and suppliers about this topic and to teach them to reliably and consistently apply anti-corruption rules in daily business dealings.

Global KARL STORZ Code of Conduct

As reported last year, an international working group was established in 2013 that deals with the topics anti-corruption and compliance. As one of the first results, a global Code of Conduct applicable to all KARL STORZ sites worldwide was introduced in December 2014. On the KARL STORZ website, it will soon be accessible to other stakeholders as well. In 2015, additional training on the Code of Conduct will be conducted to ensure proper implementation and application of the Code and to develop a reliable understanding with our employees.



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THE DIAMOND STANDARD