



UN Global Compact Communication on Progress 2019

Successful together



Human



Labor



Environment



Compliance

Communication on Progress 2019 – Table of contents

15 YEARS OF SUPPORTING THE GLOBAL COMPACT	4
KARL STORZ AT A GLANCE	6
KARL STORZ ENDOSKOPE – THE FASCINATION OF PROGRESS	8
IMPLEMENTATION OF THE TEN PRINCIPLES AT KARL STORZ	13
GLOBAL COMPACT PRINCIPLES 1-2: HUMAN RIGHTS	13
I. Africa: World Gastroenterology Organisation and KARL STORZ Partnership – Support of Training Centers in Africa . . .	13
II. Myanmar: Support of Neurosurgery Boot Camp	15
III. Brazil: Supporting medical care in rural regions	16
IV. Kazakhstan: Master Class in Zerendi	18
V. Indonesia, Ghana & Tanzania: Continued collaboration between AGA-ENT and KARL STORZ	19
VI. China: Ten regional training centers for the next generation of Chinese doctors	22
VII. Donation of medical technology products for sustainable development	24
VIII. Employee Solidarity	25
IX. Promoting the talents of children and adolescents	38
GLOBAL COMPACT PRINCIPLES 3-6: LABOR	43
I. KARL STORZ Employee Representative Committee	44
II. Support of working parents	45
III. Support of education and apprenticeship training	49
IV. University cooperation projects	54
V. Continued education at KARL STORZ	57
GLOBAL COMPACT PRINCIPLES 7-9: ENVIRONMENT	58
I. Environmental protection through innovative medical devices	58
II. Reduction of paper use	62
III. Company Fleet: Fuel consumption and CO ₂ emissions	63
IV. KARL STORZ bicycle leasing program	64
GLOBAL COMPACT PRINCIPLE 10: ANTI-CORRUPTION	66
I. Continued dedication with information and training	66

15 years of supporting the Global Compact



“We care about our environment and give back to our communities” is one of our company values, which we have been upholding with respect and integrity for more than seven decades. With our 2019 Communication on Progress Report, we are proud to document a small anniversary since this marks 15 years of KARL STORZ committing to the sustainable and forward-looking objectives of the United Nations Global Compact.

The year 2019 was a pivotal year for the KARL STORZ family company. Representing the third generation of our family, I have now, in collaboration with our 7-member executive management team, taken over operational management from my mother, Dr. h. c. mult. Sybill Storz. We are proud to thereby successfully continue our tradition as a family-run company. My mother will continue to support the company as Chair of the Supervisory Board. At the end of this year, we are already in joyful anticipation of the next, in which we will celebrate our company’s 75th anniversary. This anniversary is testament to our entrepreneurial foresight and long-term perspective as regards our employees, partners, society, and the sustainable use of resources. We will first focus on the following areas that have actively contributed to our company goal of acting sustainably and with a long-term perspective and that stand pars pro toto for our many activities.

People

This year, our activities once again focused on education and vocational training. In an effort to attract young employees and high achievers to our company, promoting our own vocational training activities remained important to us this year. This year’s Communication on Progress Report additionally highlights a project undertaken in cooperation with customers to support continued medical education in less privileged regions. The report below provides more details about these medical support programs in Africa, Asia, and South America.

These efforts were complemented by the extraordinary volunteer work of our employees, who, in a variety of creative ways, came to the aid of people in need of assistance living in their own regions. My heartfelt gratitude goes out to all employees who made a positive difference in the lives of others through their personal commitment. Their actions deserve our utmost respect and deep gratitude.

In an effort to further strengthen our employees, we presented one of the largest investment projects of our company’s history this year. We are investing €30 million in the expansion of the Tuttlingen site for the manufacture of endoscopes, instruments, and devices. The key objective of the project is to strengthen production at our headquarters in Tuttlingen and in Neuhausen ob Eck (Tuttlingen district) by expanding the production area and to spatially consolidate existing production and product development departments, which until now have been decentralized in various buildings in Tuttlingen and Neuhausen. With this important investment decision to the benefit of the Tuttlingen and Neuhausen production sites, we are investing in the performance of our employees and hereby underscore our commitment to our headquarters in the Tuttlingen region. We are building on the local manufacturing tradition which reinforces our reputation as a quality supplier and will lead us into the future.

Resources

In view of the climate debates, which are of concern to people all over the world, our company has been committed to the sustainable and responsible use of resources for many years. Due to our consistent sustainability strategy, we were able to reduce our paper use, for the 10th consecutive year, this time by 15.8% compared to the previous year.

The wide variety of positive results in this year’s Communication on Progress Report demonstrates once again that sustainability is not only an opportunity but has become a key success factor for companies.

On this basis, we are looking forward to continuing our commitment to the Ten Principles of the Global Compact in the coming anniversary year by working with our employees and partners to pursue a sustainable company strategy. We will put our full energy and commitment into this effort.

Karl-Christian Storz

Managing Director

KARL STORZ SE & Co. KG

Tuttlingen, December 30th, 2019



KARL STORZ at a glance



3,000
employees at the Tuttlingen headquarters
8,000
employees worldwide

People from over
64
nationalities working at the Tuttlingen headquarters



- 1.6%
less fuel consumption of company fleet compared to 2018 (headquarters)



47 subsidiaries in
44 countries worldwide



- 15.8%
reduction in paper use per employee compared to 2018 (headquarters)



€1.71 billion
sales in 2018



more than
15,000
products

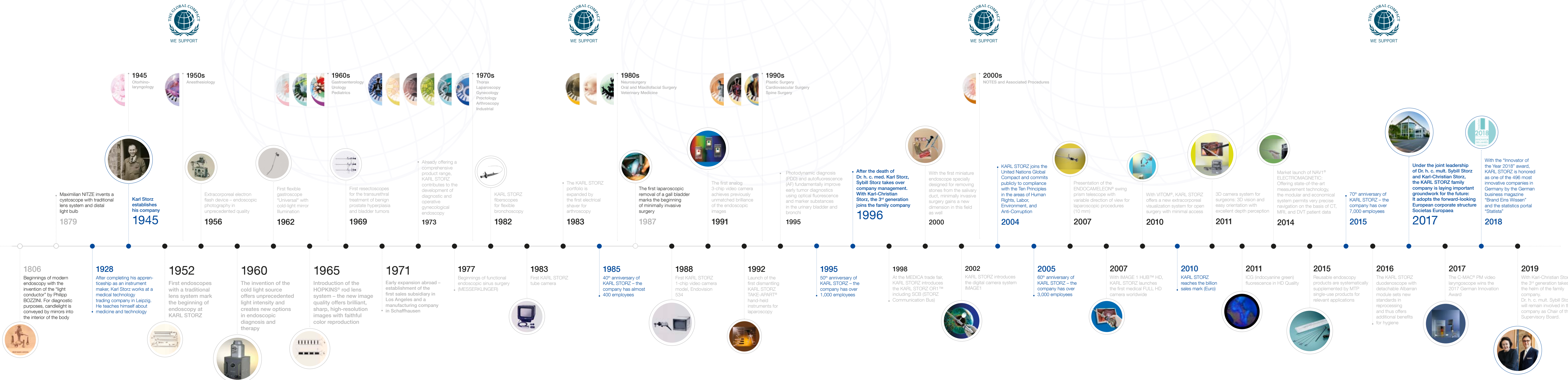


In 2019, KARL STORZ supported numerous medical relief projects in

20
countries through product donations



54
young people completed an apprenticeship at KARL STORZ in 2019



KARL STORZ – The Fascinating of Progress

The KARL STORZ family company was founded as a two-person operation in Tuttlingen, Germany, in 1945. In over seven decades, it has grown into a globally active player that now stands for innovative excellence in endoscopy for human and veterinary medicine as well as for industrial applications. Throughout its history, the company has focused on supplying functional and ergonomic devices to meet medical needs as well as using technology for the benefit of patients. An intensive professional dialog with leading physicians, university medical centers, and research institutes ensures that products and services can be designed to consistently meet the needs arising in medical practice.

At EUR 1.71 billion in sales (2018), the family company is on a steady course of growth and will continue to combine quality and progress to offer customers the best solutions to medical issues. At over 50 KARL STORZ subsidiaries in Germany and abroad, 8,000 employees worldwide pursue this goal, offering customer-focused consultation, sales, and service.

The future has tradition – and tradition has a future

This KARL STORZ guiding principle stands for the characteristics that are at the root of the company's success: Visionary ideas that are grounded by traditional, precise workmanship and are integrated into a concept of sustainable entrepreneurship. With this recipe for success, the company confidently faces future challenges. Long-term, sustainable development is always our primary concern. Our family-run company plans in terms of generations rather than quarters.

Since the company was established in 1945 by the instrument maker and entrepreneur Karl Storz, quality, precision, product safety, and innovation have been the cornerstones of our success and corporate action. A look at the timeline shows how many important inventions have contributed to endoscopy and minimally invasive surgery developing into the medical applications established today. Looking back, two

KARL STORZ inventions were particularly impactful: The cold light source (1960) and the HOPKINS® rod lens telescope (1965). These technological milestones enabled physicians to diagnose with previously unheard-of precision and develop surgical techniques that are today familiar under the name "minimally invasive surgery." This technology delivered previously unimaginable image quality in terms of light intensity, depth of field, contrast, and resolution.

About 20 years later, at the end of the 1980s, 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 has significantly 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 permanent scars are reduced to a minimum. In addition, faster healing reduces hospital stays.

KARL STORZ has been part of every phase of this revolutionary, ongoing development. In close collaboration with physicians and experts from all specialties, we have developed products that in many cases played a pioneering role and secured the company's position as a global leader. Truly knowing the requirements of our customers is essential to achieving this kind of success. In addition to profound knowledge of medical requirements, this requires close observation of specific market developments to intuitively comprehend market needs, analyze problems, and then identify what the best feasible solution may look like.



Under the motto “Passion for Medical Technology”, KARL STORZ has also in 2019 presented tomorrow’s technology trends, with the medical field’s ergonomic and efficiency demands as well as solutions for excellent imaging for the benefit of patients taking center stage. Given the multitude of our new products and innovations, this year’s product highlights particularly focus on our expertise in the areas of endoscopic imaging, motorized assistance systems, and innovative system solutions for software-supported networking in the operating room. With the new product solutions, KARL STORZ highlights its consistent systems concept, which the company’s product development has continually focused on for more than 70 years.

For optimal surgical results, the visualization and display of significant and critical structures is of essential importance to physicians. The continuous advancement of KARL STORZ camera technology in particular is constantly improving endoscopic diagnosis and thereby supports the growing range of treatments in minimally invasive surgery. In addition to all-in-one endoscopy systems, which allow mobile endoscopic documentation, there is a high demand for imaging systems that visualize specific details and thereby enable users to establish exact and robust findings and perform specific treatment. With the new IMAGE1 S™ RUBINA imaging technology, KARL STORZ combines the three major trends of endoscopic imaging in a single system: 3D technology, which permits spatial visualization of the surgical field, 4K technology, which supports image quality with greater resolution and a wider color gamut, as well as fluorescence diagnostics with NIR/ICG.

For the integrated operating room, KARL STORZ presents OR1™ AIR, a modern and easy-to-install integration solution that consists of only two modules. The system is the most compact in its class and enables 4K UHD A/V management within the operating room as well as documentation and audiovisual communication within the hospital. This and other digital solutions for the operating room promise additionally improved efficiency in terms of workflow, economy, and quality.

Our continued focus on innovation and quality as the basis of our success has been recognized again in 2019. The KARL STORZ HYDOME® system received the world-renowned Red Dot Award in the category “Product Design 2019” due to its outstanding quality of design and functionality. The HYDOME® system’s unique design that ensures maximum hygiene met the evaluation criteria regarding degree of innovation, functionality, and design quality and won over the distinguished international jury. The KARL STORZ product was selected as an award winner from among 5,500 submissions. The KARL STORZ HYDOME® duodenoscopy system combines a reusable endoscope for duodenal endoscopy and bile duct treatment with an innovative lever mechanism (“Albarran mechanism”), which is replaced by a new, hygienically safe module after each use on a patient. With this solution, KARL STORZ offers the best of both worlds: The duodenoscopy system is a reusable medical device, offering outstanding quality and lasting functionality. To prevent hygiene deficits, the lever mechanism is supplied as a sterile single-use product. This smart design solution therefore increases patient safety and reduces the risk of cross-contamination that may result from insufficient reprocessing of the lever mechanism. “We are proud that this innovative design has received the Red Dot Award. With the KARL STORZ HYDOME® system, we offer our customers an advanced, hygienic solution whose sophisticated design affords advantages in clinical handling and supports patient safety through better hygiene properties”, explained Karl-Christian Storz.

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 more than 20 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.”

Karl-Christian Storz, Managing Director, and Dr. h. c. mult. Sybill Storz, Chair of the Supervisory Board, are convinced 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 one 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. Africa: World Gastroenterology Organisation and KARL STORZ Partnership – Support of Training Centers in Africa

Background

The World Gastroenterology Organisation (WGO) is a federation of 115 Member Societies of gastroenterology, hepatology, endoscopy and other related disciplines. WGO’s focus is to promote awareness and training in the optimal care of gastrointestinal and liver disorders, and to improve care of these disorders through the provision of high quality, accessible, and independent education and training.

The WGO and KARL STORZ have partnered to increase the number of sub-Saharan African gastroenterologists receiving continuing education and training from established WGO Training Centers. Of the 23 WGO Training Centers worldwide, eight are in Africa, of which KARL STORZ helped the WGO establish five in Khartoum, Sudan; Lagos, Nigeria; Addis Ababa, Ethiopia; Nairobi, Kenya; and Blantyre, Malawi.

Program Overview

The WGO Grants Funding Program along with the support of KARL STORZ offers financial support to gastroenterologists, endoscopists, and hepatologists in areas of need to attend training at a WGO Training Center, thereby increasing the standard of training, the learning opportunities, and outcomes for gastrointestinal education at a grass roots level while ensuring a focus on regionally-relevant diseases.

Program Recipients

KARL STORZ aids the WGO in providing support for gastroenterologists from Africa that have expressed a wish to enhance their knowledge and skills in the field of gastroenterology, hepatology, endoscopy, and related disciplines. In 2019, 36 participants received grants, representing 21 countries. Of those 36 participants, 17 were from Africa, representing the African countries of Ethiopia, Kenya, Zimbabwe, Sudan, Nigeria, Somalia, Sierra Leone, and Algeria.

Educational Activities and Events

WGO Training Centers engage participants in a wide range of activities and training areas. Some of the education and events that were funded during 2019 across WGO Training Centers were:

- Fellowship training in gastroenterology
- Training courses in Upper and Lower GI
- Endoscopy medical simulator for the training of gastrointestinal upper and lower endoscopic procedures, ERCP, and EUS
- Abdominal Ultrasonography Training Course
- Advanced Endoscopic Training Course: ERCP & EUS
- Nurses Endoscopy Workshop
- Advanced Endoscopy Workshop
- Laparoscopy Workshop
- Basic and Advanced Colonoscopy Hands-on Workshop
- Training in Hepatology [basic and advanced]
- Liver Health and Social Inclusion
- Clinical IBD Preceptorship
- Hepatology Masterclass in Autoimmune Liver Diseases
- Clinical Hepatology Preceptorship
- 18th Annual Course of Hepatology, Gastroenterology, Endoscopy and Digestive Oncology

Testimonies from Grant Recipients

“As a result of my training in the Training Center, I am now able to do both diagnostic and therapeutic procedures and I am also teaching other colleagues how to do endoscopic and other procedures. I treat hepatology patients as well.”

“I am now practicing gastroenterology at a university hospital located 400 km from the capital, Addis Ababa. Here I am the only one trained in doing Endoscopy and I am providing the lesson learned at the training center in doing various procedures.”

“As I practice in a country with a limited number of gastroenterologists, the lessons I have learned will enable me to provide service in the area and train other junior doctors as well.”

“My training will enable me to offer specialized GI services to patients who do not have access to such quality in the county where I work. I also intend to organize hands-on training for my fellow GI colleagues on ERCP/EUS, as they currently do not possess the skills nor the equipment.”



Participants receiving hands on training with an endoscope at the WGO Lagos Training Center, Nigeria located in the Lagos University Teaching Hospital



Hands on training for trainees during a course at the WGO Addis Ababa Training Center at the Black Lion Hospital in Ethiopia

II. Myanmar: Support of Neurosurgery Boot Camp

Background

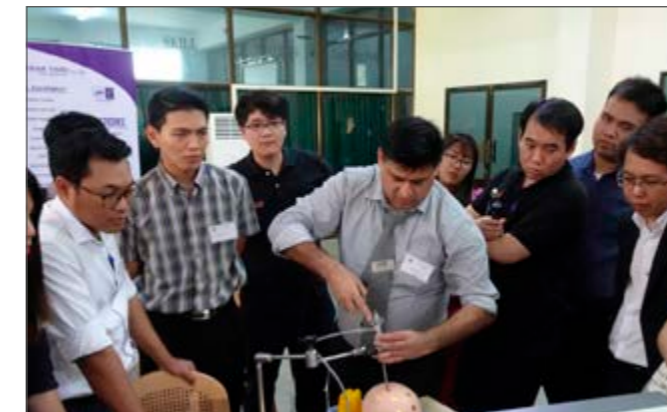
The Neurosurgery Boot Camp was held for the first time in Southeast Asia at the University of Medicine 1 in Yangon, Myanmar on February 2017 and has been continued annually since then. The courses were led by Dr. Jack Rock, Director of Neurosurgery residency program – Henry Ford Hospital, Detroit, USA with the strong cooperation of CURE, a non-profit charitable organization, with the aim to teach and train fundamental skills to neurosurgery residents.

Activities

In this project, KARL STORZ Singapore supported the necessary instruments for various training stations. Representatives from KARL STORZ further extended support by training the residents on the technical skills of using the endoscopic camera system and instruments. Moreover, they also supported the CURE organization in their activities on treating hydrocephalus in children in the region after the course.

Results

The Boot camp attendees included more than 40 residents and 20 neurosurgical faculties from Myanmar, Cambodia, Nepal, Singapore, South Korea, Thailand, Malaysia and Vietnam. The Boot camp provided fundamental didactic and technical exposure to trainees in both developed and developing countries and helps to standardize training in basic neurosurgical competencies, while exposing local faculty to important teaching methods.



Mr. Sunil Verma from KARL STORZ demonstrating how to assemble instrumentation (February 2019)



The endonasal endoscopic skull base surgery station was led by Prof. Phone Myint Tun from University Medicine 2, Yangon, ENT department, and Prof. Se-Hyuk Kim from Ajou University School of Medicine, Neurology department (February 2019)

III. Brazil: Supporting medical care in rural regions

Thanks to the support of numerous medical companies, the “Surgical Expedition” could successfully be completed in 2019 for the seventh time. Together with our Brazilian distributor H. Strattner, KARL STORZ has been supporting the project “EC-FMUSP – Expedição Cirúrgica da Faculdade de Medicina da Universidade de São Paulo” (Surgical Expedition of the Medical School of the University of São Paulo) since 2013. This project was originally designed by medical students in collaboration with physicians from HC FMUSP (Hospital das Clínicas FMUSP) and the Cleveland Clinic and each year a new generation of students is involved in this activity. The main objective is to contribute to the social, academic and professional formation of the university students through actions which are designed to improve the health conditions in remote and vulnerable places in Brazil.

EC-FMUSP aims at objective improvements in the present, by providing deprived populations with clinical care and by the development of a critical awareness and technical learning for future doctors. The medical care includes diagnostics, medical imaging and minimally invasive surgeries. The project combines aspects of medical training, research and free medical care as well as the establishment of medical structures in remote regions. In the project, the medical students have contact with each stage of the process, starting from project planning through to scientific assistance and medical care.

The project consists of three pillars: **Assistance, Education and Research.**

- With regards to assistance, the project is designed to alleviate part of the surgical demand in the poor areas, perform complete gynecological, digestive and ultrasound examinations and realize educational activities for the population. Furthermore, it brings minimally invasive technology to places where it has not been present so far, including local continuity plans. Finally, the project proposes management measures at the hospital, municipal and state level to improve the situation.
- In relation to education, the project brings the undergraduate student in contact with a different reality from that seen in tertiary hospitals in big cities. It integrates the student in each stage of the surgical process, so that they experience the surgical procedure in a global and longitudinal manner, from admission to hospital discharge and it provides technical learning of surgeries and diseases, in radiology and ultrasound. The student is also encouraged to develop a critical spirit and social awareness as well as forming links with local universities in order to maintain the exchange of experiences even after the end of the expedition.
- In the research area, the expedition includes the collection of detailed epidemiological data for further analysis and academic publication and it returns the results to the municipality. In addition, the expedition promotes the application of previously developed projects related to surgery and it is designed to motivate graduates to better understand the area of academic research.

Currently, about 50 students and physicians of the renowned Brazilian Medical School (FMUSP) and Cleveland Clinic are involved in the project and this year the expedition was realized in São Gabriel do Oeste – Mato Grosso do Sul (MS) between June 29 and July 6, 2019.

São Gabriel do Oeste has a population of 24,000 inhabitants and is located in a less privileged area of Brazil, with few resources for the health system. Complex procedures, such as laparoscopic hysterectomy, are not available in this region. The nearest place would be Campo Grande, the state capital, which is located over 137 km away. The local economy is dependent on agriculture, pig farming and cattle breeding. This town has now been selected for this project, and the number of surgical procedures performed during this initiative has helped hundreds of people, many of whom would not be able to go through this kind of treatment elsewhere.

Since the first Surgical Expedition (Expedição Cirúrgica) in 2013, the amount of performed surgeries has doubled, starting with 32 procedures and now in 2019 we have reached a total of 67 procedures. In five days of surgeries, a total of 67 procedures (laparoscopic and transvaginal) were performed, with a total of 43 gastric procedures and 24 gynecological procedures. From 67 procedures, 46 were minimally invasive surgeries, 22 cholecystectomies and 24 gynecological procedures (endometriosis treatment; hysterectomy, oophorectomy).

Not to forget the necessary prior comprehensive patient screening with hundreds of patients undergoing consultations with experts performing physical examinations, 432 ultrasound examinations and other examinations to assess if those patients were fit to undergo surgeries during the expedition.



In addition, a Scientific Symposium with themes on Gynecology, Gastroenterology and Anesthesiology was held for local staff.

Together with the Expedição Cirúrgica team, every year, we have been able to increase the number of people that can benefit from minimally invasive surgeries and spread the knowledge about these procedures, improving the health care in remote areas of Brazil.

The project thereby contributes to improving medical care in Brazil’s rural areas, spreading minimally invasive techniques, and providing training in the handling of endoscopic instruments and devices.

Together with the local dealer, KARL STORZ supported this activity again in 2019 by providing the following:

- Supply of endoscopic equipment and instruments
- Prior training of program participants on the handling of devices and instruments at the KARL STORZ training facility in São Paulo
- Funding of transport costs for the necessary medical devices
- Local support through dealer and KARL STORZ personnel



Students of the renowned Brazilian Medical School FMUSP participating in the EC-FMUSP program (July 2019)

IV. Kazakhstan: Master Class in Zerendi

Background

The history of endoscopic surgery development in Kazakhstan goes back more than 30 years. During this time, minimally invasive surgical technologies have been widely introduced in almost all regions of the Republic in all areas of surgery. Kazakhstan's stable economic development significantly increased governmental healthcare spend, which significantly affected the modern equipment of medical organizations and brought surgical care to the population of the country to a whole new level. Endoscopic methods are developing by leaps and bounds. The state sets the task of personnel training improvement, introducing modern high-tech diagnostic and treatment methods not only in large central cities, but also in remote regions, district and rural hospitals. There are 128 Central district hospitals in Kazakhstan. In most of them, there is a lack of personnel or insufficient training of doctors.

Zerendi is a small town in Northern-central Kazakhstan, located 45 kilometers from Kokshetau. It is the seat of the Zerendi District in the Akmola Region. The Healthcare Department of the Akmola region, adopting other regions' experience, requested the Kazakhstan Association of Endoscopic Surgeons (KAHE) and KARL STORZ to organize a surgical training workshop for regional hospitals in order to introduce laparoscopic methods in everyday practice. Such positive experience already exists in Almaty, East Kazakhstan, Kostanai region.

Activities

On July 4 – 5, 2019 a regional workshop “Laparoscopic Technologies in Surgery and Gynecology” was held in the Central district hospital of the town. Technical support from the KARL STORZ representative office allowed operations in 3D and 4K formats for perfect and detailed imaging and the best platform for education of specialists of the region. Leading experts in surgical areas were invited to the workshop: Professor Tokpanov, Professor Kotlobovsky, one of the pioneers of laparoscopy in Kazakhstan, and Dr. Seisembekov from Nur-Sultan.

Results

20 surgeons and gynecologists from the Akmola region took part in the workshop. They received not only theoretical knowledge in the format of lectures and presentations, but also the opportunity to participate and help in operations, to gain practical skills. The workshop included live operations with broadcasts in the conference room of the hospital, which covered the topics of general surgery and gynecology:

- Laparoscopic cholecystectomy;
- Laparoscopic myomectomy;
- Laparoscopic appendectomy;
- Laparoscopic fundoplication with hiatal hernia and Barrett's disease;
- Laparoscopic myomectomy;
- Laparoscopic cystovariectomy;

A total of six operations were performed and highly qualified care was provided to patients and residents of the district.



Surgeons and gynecologists taking part in the workshop “Laparoscopic Technologies in Surgery and Gynecology” (July 2019)

V. Indonesia, Ghana & Tanzania: Continued collaboration between AGA-ENT and KARL STORZ

Background

The Association for the Global Advancement of ENT Surgery and Head and Neck Cancer Research (AGA-ENT) is an international organisation dedicated to the advancement of Ear, Nose and Throat Surgery and Head & Neck Cancer Research across the world, in particular but not exclusively by:

- Supporting the provision of equipment, awareness and screening programmes
- Supporting cancer research by the provision of grants

Currently AGA-ENT is promoting global health efforts in low and middle income countries with a specific focus on projects in Indonesia, Ghana, Tanzania and India. KARL STORZ has supported AGA-ENT for years and donated equipment to the charity which was used to support a screening programme for nasopharyngeal cancer in Yogyakarta, Indonesia, a hands-on endoscopy simulation workshop, and the ongoing surgical training work in Moshi (Tanzania), Accra (Ghana), Banyumas, Wonosari and Yogyakarta (Indonesia). Some of the charity's recent work on raising the awareness of the carcinogenic effects on betel nut chewing has been published in The Lancet Oncology and work on the improvement of tracheostomy care in Yogyakarta, Indonesia, has been published in the journal Clinical Otolaryngology.

AGA-ENT – KARL STORZ Fellowship

KARL STORZ has continued its collaboration with the Association for the Global Advancement of ENT Surgery and Head and Neck Cancer Research (AGA-ENT) and awarded funding for four AGA-ENT – KARL STORZ fellowships for 2019. The main aim of these fellowships is to allow senior ENT trainees and junior consultants to train local staff in Indonesia, Ghana and Tanzania for around 2 weeks, using the equipment donated by the company KARL STORZ to district general hospitals in these countries. This ensures the sustainability of the investment and nurtures the relationship between the project partners with the overall aim to improve surgical outcomes.

Congratulations to the 2019 AGA-ENT – KARL STORZ Fellowship Award Winners:

Mr. James Rudd

(Higher Surgical Trainee in Otolaryngology, Guy's and St. Thomas Hospital)

Mr. Afiq Mohammed

(Higher Surgical Trainee in Otolaryngology, West of Scotland rotation)

Miss Louisa Ritchie

(Higher Surgical Trainee in Otolaryngology, Queen's Hospital, Romford)

Mr. Liam Sutton

(Higher Surgical Trainee in Otolaryngology, Barts Health NHS Trust)

Work at the Korle Bu Hospital in Accra, Ghana, in October 2019 (Fellowship Award Winner Mr. James Rudd)

KARL STORZ has donated equipment to the Korle-Bu Teaching Hospital (Accra, Ghana) in the past and the awarded fellowship allowed Mr. James Rudd, a senior trainee in ENT/Head and Neck Surgery in London, to travel there together with Professor David Howard from the Royal National Throat Nose and Ear Hospital, and latterly Imperial College NHS Trust, who has been visiting the hospital for the last twenty years on the invitation of Professor Emmanuel Kircher, and more recently by the Head of Department Dr Kenneth Baidoo. Also visiting was Mr Hassan El-Hassan a sub-specialist rhinologist of The Homerton University Hospital. The team worked with local surgeons with the equipment donated by KARL STORZ and will return next year in January to further this fruitful collaboration.



Mr. James Rudd and Professor David Howard at the Korle Bu Teaching Hospital in Accra, Ghana

Work at the Banyumas District Hospital, Wonosari District Hospital and Dr. Sardjito Hospital, Yogyakarta, Indonesia (Fellowship Award Winner Mr. Mohd Afiq Mohd Slim)

KARL STORZ has supported the collaborative Nasopharyngeal Cancer Early Detection Initiative for years and has donated equipment to AGA-ENT to supply and work with local surgeons to visualise the postnasal space, the area from which nasopharyngeal cancer arises, and to allow them to direct biopsies in order to aid diagnosis and early detection. Mr. Mohd Afiq Mohd Slim, a senior trainee from Scotland, visited the Banyumas District Hospital, Wonosari District Hospital and Dr. Sardjito Hospital, Yogyakarta (Indonesia), and worked with the team, identifying any potential problems and challenges local surgeons face using all the donated equipment. In his report Mr. Mohd Slim summarises: 'It was great to see that the endoscopic equipment donated to the Wonosari District Hospital helped the local ENT surgeon Dr Ima to successfully diagnose 17 Nasopharyngeal Carcinoma (NPC) patients at an early stage in this satellite ENT centre in 2018 who she then referred onwards to the Dr Sardjito Hospital, the main university hospital in Yogyakarta. At the Banyumas District Hospital, Dr Hariyudo is utilising the donated equipment to its maximum potential. He is recording all of the endoscopic findings electronically with the KARL STORZ portable screens with good anatomical subsite examination and has standardized his operating procedure. Dr Hariyudo has also started performing minimal endoscopic sinus surgery and endoscopic septoplasty using the supplied 4 mm and 2.7 mm 0-degree nasendoscopy set.



Mr. Mohd Afiq Mohd Slim with the team at Banyumas District Hospital and after a lecture at the Wonosari District Hospital

Work at the Kilimanjaro Christian Medical Centre, Moshi, Tanzania (Fellowship Award Winner Miss Lulu Ritchie)

Surgical training and the provision of surgical care in Moshi, Tanzania, was greatly enhanced through a donation of ENT equipment by KARL STORZ to AGA-ENT's project partners both in 2018 and this year. This year's Fellowship Award Winner Miss Lulu Ritchie travelled to Tanzania with the donated KARL STORZ equipment. She set it up there and together with Prof. David Howard (a Founding Member of AGA-ENT

who has been teaching in Moshi, Tanzania, for years and greatly facilitated AGA-ENT's efforts in Tanzania) she taught the local surgeons using the new set of oesophagoscopes and equipment for foreign body removal, in addition to the equipment brought to the Kilimanjaro Christian Medical Centre (KCMC) by Mr. Matt Lechner and Prof. David Howard in August 2018. The KCMC is an approximately 400-bedded hospital with an estimated catchment population of 15 million people. Any global health interventions here therefore make a palpable impact on health equality in Tanzania. In this area foreign body ingestion requiring surgical removal is very common and the team did not have the appropriate equipment to deal with this before. The visit in August 2018 and in November 2019 and the donation of the equipment greatly facilitated the training of the local surgical team and the overall surgical care in this area.



Miss Ritchie was the third AGA-ENT KARL STORZ fellowship winner and brought new equipment which was kindly donated by KARL STORZ

Work at the Banyumas District Hospital, Wonosari District Hospital and Dr. Sardjito Hospital, Yogyakarta, Indonesia (Fellowship Award Winner Mr. Liam Sutton)

Mr. Liam Sutton, a Higher Surgical Trainee in ENT/Head and Neck Surgery at the Royal London Hospital in London, was awarded the fourth 2019 AGA-ENT – KARL STORZ fellowship. He has already been part of the team who brought ENT equipment, worth more than £20,000 (kindly sponsored by KARL STORZ), to the Banyumas District Hospital, Wonosari District Hospital and Dr. Sardjito Hospital, Yogyakarta (Indonesia) in 2016. During the visit in 2016 he worked on a project on the advancement of tracheostomy care in Yogyakarta and published this work in the journal Clinical Otolaryngology. During the current trip, he continued this 2016 project work on local tracheostomy care and advanced the NPC Early Detection Initiative.



Mr. Liam Sutton was the fourth AGA-ENT KARL STORZ fellowship winner and trained local doctors using the new equipment and advanced local tracheostomy care and the NPC Early Detection Initiative

Publications:

Barriers to improving tracheostomy care in low and middle income countries: our experience of a 23 patient closed loop audit cycle. L. Sutton, et al.; Clinical Otolaryngology; 2018; doi: 10.1111/coa.13151

Betel nut chewing in high income countries – lack of awareness and regulation. M. Lechner, C. Breeze, F. Vaz, V.J. Lund, B. Kotecha; Lancet Oncology; 2019;20(2): 181-183.

Author: Mr. Matthias 'Matt' Lechner, MD, PhD, FRCS, FHEA, from the UCL Cancer Institute, University College London, UK, one of Europe's largest and most productive centres of biomedical research, and Barts Health NHS Trust, serves as Co-President and Co-Chairman of Trustees of the Association for the Global Advancement of ENT Surgery and Head and Neck Cancer Research (AGA-ENT), a UK registered charity with the aim to promote global health efforts in low and middle income countries.

VI. China: Ten regional training centers for the next generation of Chinese doctors

KARL STORZ dedicated ten training centers covering from head-to-toe minimally invasive surgery (MIS) skills training for Chinese doctors throughout Greater China, among which seven training centers have been completed and three centers are under development. Leveraging KARL STORZ hardware, software and human expertise, the established training facilities have hosted 50 training sessions for young Chinese doctors so far, and provided world-standard Gynaecological Endoscopic Surgical Education and Assessment (GESEA) training courses to 1,269 Chinese doctors in 46 working sessions. As part of a five-year MIS training project with Renji Hospital Shanghai Jiaotong University School of Medicine, the Renji Hospital Training Center provided Chinese surgeons with high-quality MIS training courses and academic exchange programs for the second year.

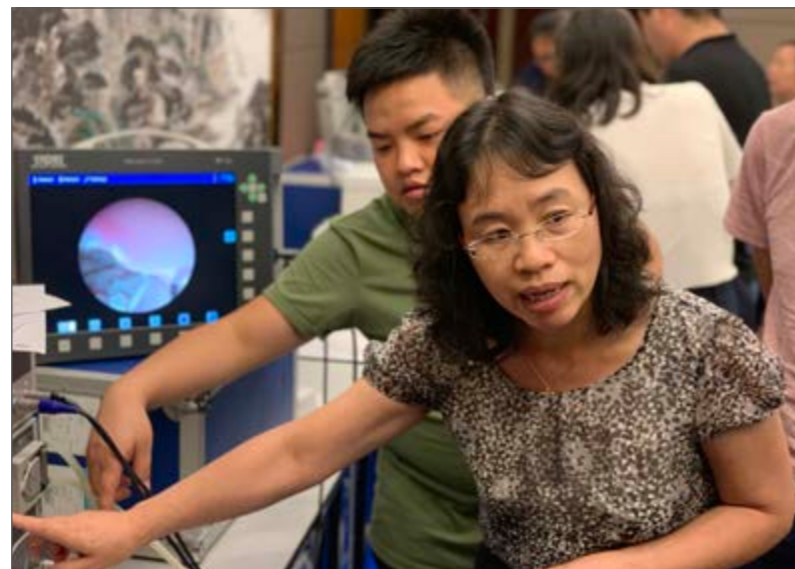
KARL STORZ Dedicated Training Facilities	Service Area	Project Status
Resident Training Base, The First Affiliated Hospital Sun Yatsen University	Southern China	Completed
Training Center, Pamela Youde Nethersole Eastern Hospital	Hong Kong	Completed
MIS Training Center, Queen Mary Hospital	Hong Kong	Completed
Training Center, The University of Hong Kong - Shenzhen Hospital	Southern China	Completed
Endoscopy Training Center, The Affiliated Hospital of Medical College Qingdao University	Eastern China	Completed
MIS Training Center, General Hospital of Ningxia Medical University	Northwestern China	Completed
MIS Training Center, General Hospital of Ningxia Medical University	Eastern China	Completed
Endoscopic Anatomy Center, Shanghai Huashan Hospital Fudan University	Eastern China	In Construction
MIS Training Center, Shengjing Hospital of China Medical University	Northwestern China	In Construction
Training Center, The First Hospital of Lanzhou University	Northwestern China	In Preparation



Chinese doctor Prof. Liu Junxiu demonstrating laparoscopic suturing at the GESEA workshop (September 2019)



Prof. Giuseppe Bigatti hosted the "New Trends in Operative Hysteroscopy" training course at the MIS Training Center of Renji Hospital (April 2019)



Prof. Chen Yuqing, a qualified trainer for hysteroscopy shared her skills (July 2019)

VII. 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 2019, we supported projects in the following countries:

- Tanzania
- South Africa
- Nepal
- Senegal
- Egypt
- Haiti
- Greece
- Nigeria
- Jamaica
- Mozambique
- Honduras
- Kenya
- Burkina Faso
- Eritrea
- Cameroon
- Myanmar
- Botswana
- Chad
- El Salvador
- Peru



VIII. Employee Solidarity

KARL STORZ employees support charitable organizations

For many years, the key objective of KARL STORZ sports events has been to strengthen team spirit through sports activities and simultaneously contribute to charities. As part of this year's sports events, the 26th International KARL STORZ Volleyball and Soccer Event in March 2019 and the 32nd KARL STORZ Soccer Tournament in July 2019, a total of €6,000 was generated in revenue and donations. Traditionally, the KARL STORZ Aktiv company sports group, which has been organizing and hosting the sports events for many years, donates the proceeds to a regional charity: This year, all revenues of both events benefited the Tuttlingen "Tafel", a charity that collects excess food from producers and grocers and passes it on to people in need.

In an official donation ceremony, the Tuttlingen Tafel was pleased to receive the generous financial support from Dr. h. c. mult. Sybill Storz and Nader Hassanzadeh, president of the KARL STORZ Aktiv company sports group. As an organization working on behalf of Diakonie, the social welfare organization of Germany's Protestant churches, Tafel provides people in need with high-quality groceries at very low prices. Due to increasing demand, Tafel is in need of volunteers and financial and in-kind donations.

Dr. h. c. mult. Sybill Storz Chair of the Supervisory Board of KARL STORZ SE & Co. KG

"As a family company, we are very pleased to see KARL STORZ employees actively supporting the sports events as volunteers, visitors, and active athletes. This year, our employees and business partners were particularly generous, and we therefore generated considerable net proceeds with which we were able to help people in need in our region." (October 2019)



Presentation of the donation (October 2019)

International Day of Charity – KARL STORZ supports the work of the NGO German Doctors in Kolkata

To mark the International Day of Charity on September 05, 2019, the supporting organization of the NGO German Doctors decided to hold various fundraisers to support the work of German physicians in the slums of Kolkata by a donation of around €10,000.

As a longstanding member of the supporting organization, KARL STORZ participated by holding a fundraising drive as well: The company management gave one euro for each kilometer run by KARL STORZ employees in this year's running events run & fun (June 29 and 30, 2019) and Berlin Company Race (May 22, 2019). Dr. h. c. mult. Sybill Storz and Karl-Christian Storz then generously topped off the collected €683 to a total of €2,000.

In an official ceremony, the donation was presented to Dr. Elisabeth Kauder, president of the NGO and physician volunteer of German Doctors. "We appreciate the commitment of KARL STORZ and Dr. Storz, who have been providing financial and non-financial support to German Doctors for many years. With this excellent initiative, the German Doctors' supporting organization not only helps us provide local medical care but also raises awareness of the project and the numerous physicians who volunteer their time," explained Elisabeth Kauder.

For more than 30 years, the volunteer physicians of German Doctors have been providing basic medical care for people in disaster areas and poverty-stricken regions. To ensure the health care of poor people in the slums of Kolkata, three teams of two doctors each as well as translators and nurses drive to various slum outpatient clinics in the city every day to treat patients. As part of the Kolkata project, which was initiated in 1983, about 40,000 treatments are performed annually. The donation by the support organization will pay for the medications needed by one team of physicians in the slum outpatient clinics for a quarter of a year.

Dr. h. c. mult. Sybill Storz Chair of the Supervisory Board of KARL STORZ SE & Co. KG

"With the fundraising campaign to mark the International Day of Charity, we would like to honor the exemplary volunteer work of German Doctors and join other members of the supporting organization in contributing to the basic medical care of people in the slums of Kolkata." (September 2019)



International Day of Charity: Dr. h. c. mult. Sybill Storz presents a donation of €2,000 to Dr. Elisabeth Kauder, president of German Doctors (September 2019)



KARL STORZ runner and volunteer teams at the 2019 run & fun (June 2019)



KARL STORZ had runners take part in the Berlin Company Race (May 2019)

KARL STORZ Group – Subsidiaries’ Initiatives
China: Ten-year support for underdeveloped school districts in rural China

The year 2019 marks the 10th anniversary of KARL STORZ China helping students and teachers in Huaiyuan County of Anhui province, an underdeveloped community that tops the national poverty alleviation list. KARL STORZ started providing scholarships, teaching aids, donating school supplies, and providing extra-curriculum classes to local K1 to K9 schools since 2009, with total donations reaching €165,355.

At Xuyu school district, KARL STORZ donated a standard 8-man soccer pitch to Xuyu Middle School that started construction in 2018 and completed this year. Employee volunteers organized the first FIFA standard soccer match between school teams and KARL STORZ employee teams this year to inspire local students participating in sports, enjoy the competitive spirits while exercising, and build resilience in body and mind. The 2,696 square-meter soccer pitch could also be used by near-by neighborhood schools and benefit more students.

At Baoji school district, KARL STORZ started to help more financially distressed schools this year, this included 28 elementary schools and 3 middle schools. A total of 10,110 students from these 31 schools will start to benefit from KARL STORZ charitable support from now on.

To continue the KARL STORZ tradition, company employee volunteers made two separate trips to visit local schools in April and September, bringing school desks and chairs, sports supplies, and scholarships. A selected group of 144 excellent-performing local teachers received KARL STORZ teaching aids this year.



Selected local teachers receiving KARL STORZ teaching aids (2019)



Soccer pitch opening at Xuyu Middle School donated by KARL STORZ (2019)



KARL STORZ CUP soccer match kickoff (2019)

KARL STORZ Group – Subsidiaries’ Initiatives

India: Support of underprivileged children in Gurugram

Agrasar Bachpan was founded in 2010 and is a non-governmental organization based out of the millennium city of Gurugram. Through its various programs the foundation focusses on out-of-school children and underprivileged children to help them to attain the age appropriate learning levels through quality education. In addition, the children get mainstreamed into formal schools. The main vision is that the children achieve a universally valid education and a cultural shift in the education ecosystem of India. The organization teaches 5 to 12 years old out-of-school children in community-based non-formal learning centers. Furthermore, they offer remedial classes and regular follow ups for the students. The teachers focus on activity-based and experiential learning. They want to build strong academic foundations and imparting life skills for the childrens’ holistic development. Teachers have developed a robust curriculum in line with NCERT (National Council of Educational Research and Training) learning indicators. There is also a quarterly assessment to capture each student’s learning progress. The parents are regularly informed about their children’s school performance.

This year employees of KARL STORZ India supported Agrasar Bachpan with art, craft and story sessions. They also visited the center of Agrsar Bachpan to celebrate the Diwali festival, a celebration of lights and companionship. The occasion was celebrated with great enthusiasm and joy as the team also participated in the performances and interacted with teachers and children about their journey so far. This Diwali was special for the team as it marked not just a celebration but an event that spurred the connection of children and teachers with the space that they shared. They decorated the space together and renewed the center with hand-crafted colorful charts, posters, messages, art and craft. Also, the children prepared traditional dance performances like Dandiya and Garba, solo songs and Rangoli designs which added color and warmth to the space.



Employees of KARL STORZ India celebrating with the children of Agrsar Bachpan (2019)

KARL STORZ Group – Subsidiaries’ Initiatives

USA: Workforce Diversity

Business Resource Groups

KARL STORZ Endovision, Inc. (Charlton) commits to supporting the growth and development of diversity through fostering the development of Business Resource Groups. Business Resource Groups are grassroots groups formed by employees across all demographics – race, national origin, gender, sexual orientation, disability, education, geography, military status, occupation, etc. A Business Resource Group is identified as a group of employees who come together around common interests, issues and background and exists to provide support, networking and professional opportunities. The purpose of the groups is to be a strategic partner with KARL STORZ Endovision, Inc. to promote a culture of diversity and inclusion through continual learning.

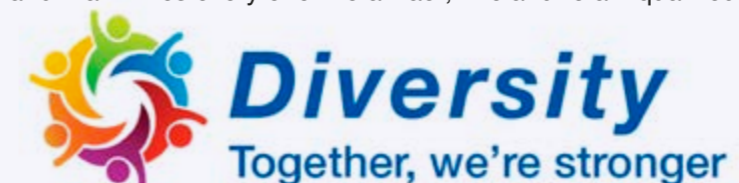
The groups help to provide a work environment free from discrimination or harassment based on religion, sex, marital status, national origin, disability, veteran status, age, sexual orientation, gender identity and any other factor applicable by state or federal laws. The subsidiary recognizes a responsibility and a strategic opportunity to proactively support workforce diversity in addition to complying with legal standards. Business Resource Groups will promote diversity and inclusion within KARL STORZ that will foster and strengthen workplace effectiveness and leadership abilities, enhance professional development and promote career growth and success within KARL STORZ.

KARL STORZ Endovision, Inc. has six different Business Resource Groups:

1. Veteran’s Network Group
2. Women’s Network Group (also known as WORKS)
3. Pan-Asian Network Group
4. African American Network (also known as KAAN)
5. Latino Network Group
6. LGBT Network (also known as Human Prisms)

Business Resource Groups increasingly are the best vehicles to find support and develop talent from staff from traditionally underrepresented groups. Helping organizations stay connected to the diverse voices and perspectives of the employees will yield positive results and creative innovations for supporting a successful workplace environment, which will in turn benefit KARL STORZ. The groups may perform the following functions:

- **Mentoring/Coaching:** a growing network of unique roles to provide information, guidance and resources for job advancement, professional development, and performance improvement (including critical thinking and decision making).
- **Career Development:** a lifelong process which includes learning and developing new skills to advance professionally.
- **Leadership Preparation:** a process by which an individual collaborates with, and supports others, to accomplish the group’s mission and leadership development of members.
- **Conflict Resolution:** a range of methods that foster collaboration, negotiation, mediation and resolution between Business Resource Group members.
- **Diversity Development:** works with individuals to advance knowledge of best practices concerning diverse cultures and ensures implementation in the workplace.
- **Community Engagement and Diversity Recruitment:** encourages collaboration with diverse communities and maximizes every effort to attract, hire and retain qualified diverse individuals.



KARL STORZ Group – Subsidiaries’ Initiatives
USA: Community Services

At our subsidiaries in the U.S. employees volunteered to join forces and commit to the following projects:

Community Impact

KARL STORZ continues to work with local and national charities and social welfare organizations. Through fund drives, raffles, and corporate matching grants, employees raised thousands of dollars for the United Way of Southbridge, Sturbridge, and Charlton in Massachusetts. In 2019 KARL STORZ received the United Way Diamond Award for its efforts in supporting this local charity. Employees further donated clothes, food, toys, services, and school supplies to benefit Auburn Youth and Family Services, the Southbridge YMCA, and St. John’s Church in Worcester.



KARL STORZ receives the Diamond Award from the United Way, a charitable organization focused on strengthening local communities

LA Regional Food Bank

For the past four years, KARL STORZ has partnered with the Los Angeles Food Bank to provide food and meals to needy recipients. For the yearly KARL STORZ Day of Impact, volunteers helped assemble food packages for more than 27,000 low-income seniors, women with infants, and children in Los Angeles County.



Volunteers assemble food baskets for poor and elderly recipients in Los Angeles

KIDSAVE

KIDSAVE and the Los Angeles County Department of Children and Family Services (DCFS) work together to find permanent adoptive families or long-term mentorship for older youths in the County’s foster care system. For the past five years, a team of employees of KARL STORZ Endoscopy America (El Segundo) along with KIDSAVE have organized and led a fund-raising hike. These hikes provide an opportunity for each youth to spend time and get to know prospective hosts and adoptive families, and build on their relationship while in a community setting. After the hike everyone enjoys a delicious lunch provided by the KARL STORZ team. To date, the hikes have raised over \$165,000 and brought numerous youths and families together. These events support the KIDSAVE mission so that forgotten children and foster kids grow up in families and connected to caring adults.



Participants at the KIDSAVE fund-raising hike

Soap for Hope

KARL STORZ Endoscopy America (El Segundo) collected donations of toiletries and sent them to local shelters in Los Angeles that support victims of domestic violence, veterans, and homeless individuals.

Hurricane Relief

Employees at KARL STORZ Endoscopy America (El Segundo) held a fundraiser for the American Red Cross to provide aid to those affected by Hurricane Dorian.

Helping Co-workers

Employees at KARL STORZ Endoscopy America (El Segundo) raised funds to support the Adopt-A-Family program, which provides confidential donations for colleagues who have been adversely affected by economic or family troubles. Fundraising activities this year included a series of raffles.

Cancer Awareness

In recognition of Breast Cancer Awareness Month (October), KARL STORZ Imaging (Goleta) took part in the 27th annual run to support the Ridley-Tree Cancer Center in Santa Barbara. KARL STORZ earned the Silver Cup, awarded to the team raising the most money per person. Employees also took part in the annual Cancer Awareness Week in late October. Each day focused on a different type of cancer. In addition to a number of fundraising events, activities included discussions and information sessions devoted to an array of cancer-related issues. Topics ranged from breast and bladder cancer to oral health and cancer prevention.



Participants in the run event raised funds for cancer research

KARL STORZ Group – Subsidiaries’ Initiatives

USA: Educational Support

KARL STORZ Imaging (Goleta) supports the education and development of local youths in engineering and computer science with the following projects:

La Patera Elementary School - Science, Technology, Engineering and Mathematics (STEM)

The Product Development department in KARL STORZ Imaging (Goleta) is participating in the La Patera Public Elementary School STEM education program. The program provides the students aged 5 to 11 access to various technical fields through interactive programs and presentations. Representatives of KARL STORZ meet with children providing them with hands on experience with medical devices in a demonstration environment and encouraging them to get excited about and interested in science, engineering and medicine.

Dos Pueblos High School Engineering Academy

The Dos Pueblos Engineering Academy (DPEA) is a four-year Career Technical Education (CTE) program based at Dos Pueblos High School in Goleta, California. It applies project-based learning to teach students critical, analytical, design and problem-solving skills, and is a CTE Pathway in the Engineering and Design Industry Sector.

In 2019 KARL STORZ continued its financial contribution to the continuation of this public school program as an Innovator Sponsor. The Product Development department in KARL STORZ Imaging (Goleta) also provides the academy with a paid summer internship to promote interest and experience in the field of medical device design and development for these future engineers.

The 2019 DPEA news publication contained the following quote from the student who interned at KARL STORZ “Without this internship, I would not have been completely sure which field of engineering I would like to major in and pursue as a career. After experiencing the different types of engineering at KARL STORZ, I realized that mechanical engineering was the perfect fit for my personality.”

Local University Engineering Programs

KARL STORZ product development directors at KARL STORZ Imaging (Goleta) provide their service as guest lecturers at the local universities to explain and demonstrate how different science and engineering disciplines are utilized in product development and innovation of medical devices.

KARL STORZ Group – Subsidiaries’ Initiatives

South Africa: Community Services

In 2009, the UN General Assembly declared the Nelson Mandela International Day. Nelson Mandela once said, “It is in your hands to make of the world a better place”; with this idea in mind, the South African KARL STORZ subsidiary annually provides help to people needing support in its vicinity.

At our subsidiaries in South Africa (Cape Town, Durban, Johannesburg), employees volunteered to again join forces and support the following institutions.

Helen Keller Society

The Helen Keller Society exists to continue the God-inspired mission embarked upon by Helen Keller when she visited South Africa in 1951. The Society is a Christian organization, providing assistance to all visually impaired persons of all ages. It also runs a retirement center for both visually impaired and sighted persons.

More residents than usual attended tea that morning and they thoroughly enjoyed the interaction and time spent with the KARL STORZ Cape Town office staff who spoiled them for an hour. Coming away from Helen Keller after having listened to some interesting stories and feeling incredibly humbled, it was agreed that visits would be made as and when time permitted. As with many homes of this nature, not all people living there have surviving relatives and/or children, therefore have no visitors. Thus, their appreciation of the love and interaction given was most heart-warming for them.



KARL STORZ Cape Town office staff at the Helen Keller Society (July 2019)

Animal Anti-Cruelty League

The Animal Anti-Cruelty League is a non-profit making organization which does not receive a subsidy from the government and has been protecting and caring for animals since 1956. It is the second biggest independent animal welfare organization in South Africa and relies entirely upon the generosity and goodwill of the animal-loving public for financial support.

The KARL STORZ Cape Town office staff didn’t just get to see the dogs and cats through fencing: Following a tour of the premises and being given a set of DOs and DON’Ts, the group was allowed to physically interact, e.g. by a walk.

Again, that interaction wasn’t just for the day. There has been commitment by KARL STORZ employees to volunteer at the Animal Anti-Cruelty League on weekends as well as to drop off donations as and when possible.



The KARL STORZ staff joined in together with all the donations secured for the cats and dogs (July 2019)

St Thomas

St Thomas is a registered non-governmental organization with the aim to provide their children with the closest to a loving home environment as possible. The childcare workers that work with the children are the only mothers that some of them will ever know. They have to be able to effectively provide, nurture and care together with love and compassion. When contact was made to arrange the Mandela Day, the KARL STORZ Durban office was met with gloomy news. The home had been destroyed and was uninhabitable. The home agreed that KARL STORZ employees would continue working with it to raise funds and donate towards cleaning materials. These cleaning materials really helped with the day to day challenges at the temporary home the children are in at present. The home was assisted by KARL STORZ employees in setting up a fundraising forum and they meet Saturday afternoons to work together on the various projects. The KARL STORZ Durban office has submitted funding applications at Lotto and Community Chest, approached a group of Indian doctors who undertake collective fundraising, set up a Facebook page and a BackaBuddy campaign. They have also approached radio stations 5FM and East Coast Radio and are assisting them with other fundraising efforts via Twitter and Instagram.

CHOC Child Cancer Foundation

KARL STORZ Johannesburg office staff visited the CHOC Child Cancer Foundation SA home in Centurion. CHOC is a non-profit organization made up of caring, committed and passionate people who stand up for and support the well-being of children and teenagers diagnosed with cancer or life-threatening blood disorders and their families. They have homes throughout the various regions in South Africa. CHOC homes depend on support and donations for food, payment of medical bills, transport and the support of caretakers. Some caretakers travel 2-3 hours to support their children with most being unable to afford the costs as they come from underprivileged communities. The Centurion home accommodates children under the ages of 18 but the most common age group is between the ages of 3 and 12 years. They can accommodate 8 children and their caretakers. The number of children in the house varies as their treatment processes differ due to the hospital protocol. Employees of the KARL STORZ Johannesburg office had a tour of the home and were given a lecture about cancer and educated on how they can take care and support our families and friends affected by this disease. With great teamwork amongst colleagues, KARL STORZ managed to donate food as per CHOC's wish list, put together party packs for the children at the home and did some much-needed cleaning.

KARL STORZ Group – Subsidiaries' Initiatives South Africa: Educational Support

There is both anecdotal and empirical evidence of skills shortages in a number of occupations and economic sectors within South Africa. Importantly, this fact co-exists with a relatively high level of unemployment. It also contributes to individuals' low levels of success in finding employment after successful completion of education and training. It is clear that there is a tangible problem arising from the mismatch between the supply of and demand for skills in the South African labor market.

The best way to address this mismatch and to ameliorate the implications that arise as a result, is to implement a successful, comprehensive and credible HRD (Human Resources Development) strategy.

In view of our current and projected economic and social development activities and objectives, it is necessary to adopt a short- as well as medium-term perspective.

To this end, KARL STORZ South Africa has successfully contributed towards the Human Capital Development Strategy of South Africa by investing in the improved qualifications of students as well as providing graduates an opportunity to apply their theoretical knowledge and gain valuable work experience for the purpose of them obtaining gainful employment.

To date, three students have obtained improved qualifications; graduating with National Diploma and BTech Degrees. Two students have successfully completed the CRICE course which is a prerequisite for a medical sales representative. We have offered permanent appointments to four out of the seven students, with two still in the process of completing their internships, thus ensuring that both the short- and long-term objectives of both the business and country are met.

IX. 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 to 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.

This year’s Jugend forscht competition (2019) was held under the motto “Frag nicht mich. Frag Dich!” (Don’t ask me. Ask yourself!). This was the 54th round of Germany’s most successful youth competition. Regional competitions were held throughout Germany and the winners qualified for the next round in state and federal competitions. After the regional premiere in 2014, the sixth competition for the “Donau-Hegau” region was held in Tuttlingen in 2019.

The sponsors of the competition, KARL STORZ SE & Co. KG and the City of Tuttlingen, have been very satisfied with the rising interest of young people to participate in the competition. In February 2019, 129 participants presented their abilities and knowledge in 65 projects in the fields of technology, work environment, physics, chemistry, biology, mathematics and computer science. In addition to the benefit from the experience of having participated in Jugend forscht, young researchers gain skills that will be great assets for their future.

The competition’s sponsors are already looking forward to the next Donau-Hegau regional competition, which will be held in late February 2020: “Schaffst du!” (You can do it!) is the motto of the 2020 “Jugend forscht” youth research competition. The next regional competition will again be organized by the sponsors KARL STORZ and City of Tuttlingen and held at the KARL STORZ Visitor Centre and the Civic Center of Tuttlingen. For 2020, we expect a total of 134 participants and around 70 projects in seven disciplines (as of December 2019).



Karl-Christian Storz Managing Director of KARL STORZ SE & Co. KG

“At this point, it is not too early to congratulate all participants because they look at the world with open eyes, ask questions, and want to get to the bottom of things. It is important to them to understand existing things, comprehend interrelationships, and discover new things. This year’s Jugend forscht motto “Don’t ask me. Ask yourself!” puts this motivation and participant initiative in a nutshell.” (February 2019)

Michael Beck Mayor of Tuttlingen

“In our town, research plays an increasingly important role. Many of our companies have been active in this area for many years, and our university campus now regularly contributes new impulses as well. Last summer’s opening of the Innovation and Research Center was a milestone in this regard. This makes it all the more important to recruit young researchers and to motivate and promote brilliant minds from our region. For this reason, the town is fully committed to supporting the Jugend forscht youth science competition and is happy that with KARL STORZ SE & Co. KG, one of our largest companies exhibits exemplary commitment to the event.” (February 2019)

Review of the 2019 Donau-Hegau regional “Jugend forscht” competition

Film teaser [only available in German] at: <https://go.karlstorz.com/gc-2019-de-1>

Available via QR code (please scan):



School meets medical technology

To give young adults an idea of how medical technology is designed currently and will be in the future, in July 2019, KARL STORZ invited about 150 students of Tuttlingen academic secondary schools as part of the “School meets medical technology” event.

In an introductory presentation, the 11th graders gained a variety of practical insights into current challenges and solutions in medical technology. Innovations that make surgical procedures less invasive and digital solutions that offer added value to both surgeons and patients were presented as well. Afterward, the future graduates had an opportunity to gather valuable information related to their potential training and career choices and learned about the varied vocational training and university degree programs available at the company. In a question and answer session, important information and practical tips about work and opportunities at KARL STORZ were exchanged.

The presentations were followed by the practical part of the program, where students were invited to actively take a closer look at the training of future surgeons. Using virtual reality test simulators, they tested their hand-eye coordination and tried to perform various medical techniques. At three further hands-on stations, they took advantage of the opportunity to put their new theoretical knowledge directly into practice by trying out the presented instruments and devices. They were once again invited to prove their dexterity by performing intubation on an airway model, for instance. A tour of the KARL STORZ Visitor Centre completed the program.



Nurturing young adults' enthusiasm for medicine and technology: In the hands-on workshop, students were able to try out the devices and get their questions answered right away (July 2019)

School project with the Wild Wings team

For the sixth year in a row, KARL STORZ has implemented school partnership projects “Strong Together” in collaboration with the local ice hockey club Schwenninger Wild Wings.

Whereas in the past, school classes and groups of students were invited to apply with social projects or projects related to the topic of “Exercise & Sports”, the focus topic in 2019/2020 was “Healthy Nutrition”. In this new project round, students were asked to think about why healthy nutrition is so important and how they can integrate healthy nutrition into their school days.

Participating is very easy and well worth it: KARL STORZ provides the three student teams that present the three best project ideas with up to €1,500 in funding for implementing these ideas. To end up in the top three, it is a good idea to combine a creative application with a strong project idea and a clearly defined goal, that is, to state how the project manages to integrate healthy nutrition into daily life. In addition, KARL STORZ and the Schwenninger Wild Wings support the three winning projects in the organizational implementation of their projects. As part of the closing event after project implementation, the three top projects have an additional chance to win between €500 and €1,000 for their project implementation, achieved results, and student dedication.

A motivational trailer was used to contact the schools of the counties Rottweil, Schwarzwald-Baar-Kreis, and Tuttlingen, and invite them to participate in the competition. Classes may still apply with their project ideas until February 2020.

Motivational trailer

Film teaser [only available in German] at: <http://go.karlstorz.com/gc-2019-de-2>

Available via QR code (please scan):



At the hands-on stations, students could get an idea of how physicians use the endoscopic instruments for diagnosis and treatment (July 2019)

KARL STORZ & Wild Wings: Final event for the cooperative project “Gemeinsam stark” (Strong Together) 2018/2019



Closing event of the “Gemeinsam stark” (Strong Together) cooperation project. KARL STORZ and the Schwenninger Wild Wings congratulate the students from Villingen, Spaichingen, and Donaueschingen (June 2019)

In late 2018, we started the fifth round of the school partnership project “Gemeinsam stark!” (“Strong Together!”), which was initiated by KARL STORZ and the Schwenninger Wild Wings: Whereas in the past, students were invited to apply with social projects, this year’s focus was on “Exercise & Sports”. In this year’s event, students were asked to think about how they can create opportunities for getting more exercise and doing more sports in everyday life to make it less sedentary and more active.

By January 2019, groups of students in grades 7 and up were invited to apply with a creative project idea related to the topic of “Exercise & Sports”. From among 11 applications, a jury made up of representatives of KARL STORZ and the Schwenninger Wild Wings chose the projects of Rupert-Mayer School in Spaichingen, St. Ursula Schools in Villingen, and Eichendorffschule in Donaueschingen. In recent months, KARL STORZ funded the implementation of these projects with up to €1,500 per project.

With this project funding, the following student projects were implemented: Nineteen students in class 9b of Rupert-Mayer School in Spaichingen submitted the “Hammer Fool Challenge” to the idea competition: The class wanted to put on a sports competition between boys and girls. The goal of the competition was to improve and then compare the fitness results of both groups over the course of eight weeks. In the meantime, the boys and girls intensively studied the topic of nutrition and sports.

The group of 7th and 8th graders from St. Ursula Schools in Villingen was chosen with its “#leParcoursula” project. By starting a new parkour club, they wanted to offer the trend sport of parkour as part of school sports and integrate it into everyday school life. Parkour particularly requires creativity and teamwork. Using obstacles, the students taking part in the club learn and practice various techniques, which they can later perfect outside.

Class 7c of Eichendorffschule in Donaueschingen contributed a project idea on the topic of sports and exercise as well. The class established a waveboard club, where students can learn and practice the basic techniques of waveboarding while wearing appropriate safety gear in an effort to integrate more sports and fun into everyday school life. They also wrote detailed instructions containing useful tips and tricks for waveboarding safety for future club members.

At the closing event held at the KARL STORZ Meeting Center in Tuttlingen, the three project teams had yet another chance of winning. The student groups presented their projects to the invited public, and KARL STORZ and the Schwenninger Wild Wings awarded prizes on the basis of the project idea, creativity in implementation, and the project’s achieved results.

KARL STORZ Head of Human Resources, Stefan Ahlhaus, ice hockey player Simon Danner, and Dennis Heitzmann, Head of Sponsoring & Hospitality at the Wild Wings, congratulated all students and announced the following results: First place in the idea competition went to the “#leParcoursula” project team of St. Ursula Schools in Villingen, who received an additional €1,000 for their class fund. With its equally excellent project, the class from Rupert-Mayer School in Spaichingen also received first place with an award of €1,000. The waveboard club of Eichendorffschule in Donaueschingen took an outstanding second place with an award of €750.

In addition, the Wild Wings forward Simon Danner, who has been sponsoring the project since its initiation, was available to the students for a signing session and selfies. “The goal of this year’s ‘Strong Together!’ idea competition is to integrate exercise, play, and sports into everyday school life, even beyond physical education class. Together with KARL STORZ, we want to support and strengthen the involvement of our young generation. We are pleased that as part of the cooperation project, we were able to highlight exercise as a means for learning and the development of team spirit,” explained ice hockey player Simon Danner.

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 labor; the effective abolition of child labor; 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, **15.8%** (2018: 15.1%) of the 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 recent statistic of the Federal Employment Agency (Bundesagentur für Arbeit) published in September 2018, women still only hold about 15% of German technical jobs (MINT = mathematics, informatics, natural sciences, and technology). At KARL STORZ, women represent **44.6%** (2018: 38.4%) of workers in manufacturing and **26.1%** (2018: 32.1%) of those in Research & Development. The company is happy about this stable result, which is far above the state average. This is considered the result of consistent human resources policies that focus on abilities rather than gender roles.

I. KARL STORZ Employee Representative Committee



Background

To promote and intensify direct communication between staff and company management, a new body – the Employee Representative Committee – was established in August 2017. The goal of this Employee Representative Committee is to offer employees direct contact persons within the staff to whom they can voice their concerns, wishes, and criticisms regarding their work at KARL STORZ. The Employee Representative Committee collects these concerns and discusses them with the company management during periodic meetings. Through this body, KARL STORZ aims to engage in an open, honest, and transparent dialog with employees – regardless of hierarchies. The body currently includes a total of 20 participants across all areas and functions. Employees can confidentially contact the employee representatives either personally or via email and submit any topics for discussion.

Results

In 2019, the Employee Representative Committee addressed the following topics to company management and contributed to a solution to benefit the staff:

- Introduction of a home office policy (effective January 2019)
- Introduction of a new recommended dress code for employees, which is primarily intended to facilitate internal daily operations (effective October 2019)
- Production building at Dr.-Karl-Storz-Strasse 11: Parking lot extension
- Building at Dr.-Karl-Storz-Strasse 34: Management approved the start of the design process for a new cafeteria
- Break rooms: Preparation of a concept for the modernization of break rooms

II. Support of working parents

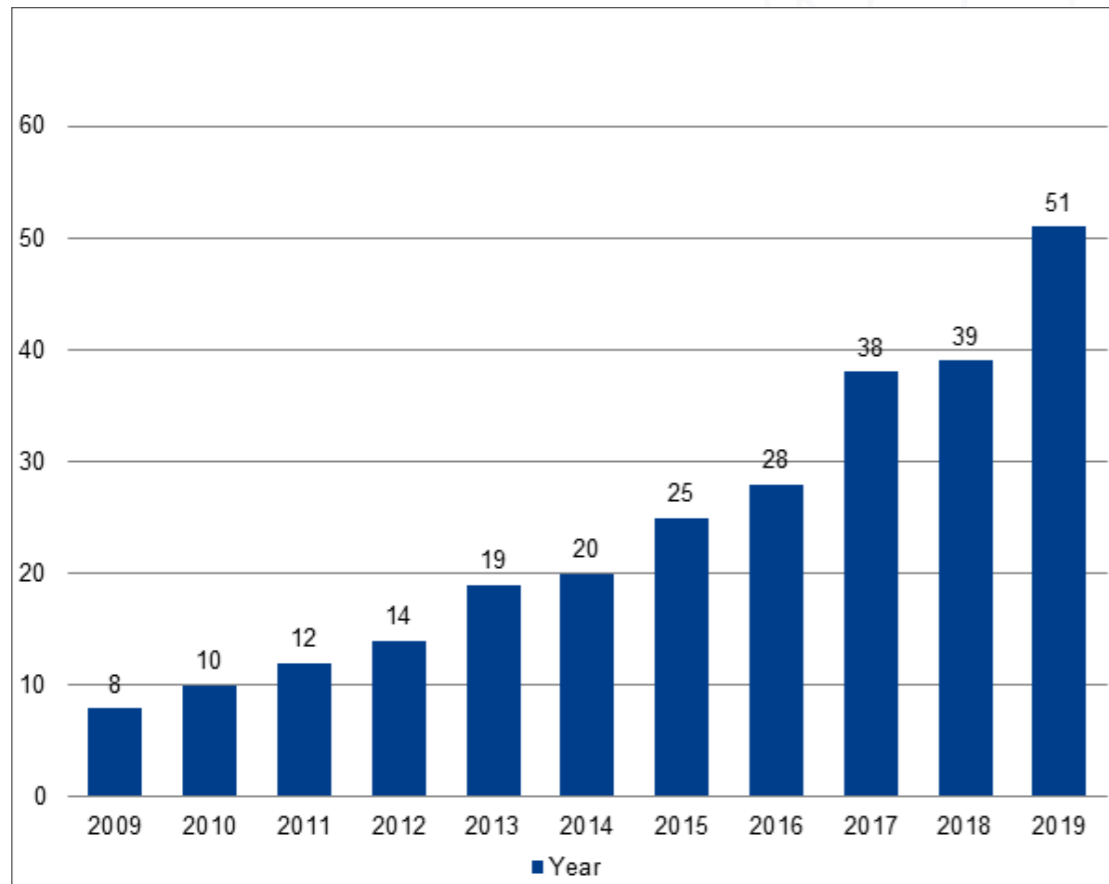


In 2019 KARL STORZ again increased its long-term commitment to supporting working parents. For the **tenth consecutive year**, KARL STORZ expanded its cooperation with the local childcare facility “Haus der Familie” [House of Family] and the childcare facility Denk mit! [Thinking together] in Neuhausen ob Eck (Tuttlingen county).

The KARL STORZ family company has now reserved a total of **51 childcare places** for use by employees with young children. The cost of care is sponsored by the company.

Within this engagement KARL STORZ cooperated in January 2016 to create 15 additional childcare places in a mixed-age group (0-6 years of age) at Neuhausen industrial park, where the KARL STORZ logistics center is located. The cost of these places is fully covered by KARL STORZ, and therefore the places are reserved for the children of our employees, but children of employees of other companies located in the industrial park may benefit from the places as well if capacities are available.

Overview of childcare places – development since 2009



	Total number	Full-day places	Half-day places
2009	8		
2010	10		
2011	12	10	2
2012	14	13	1
2013	19	16	3
2014	20	15	5
2015	25	20	5
2016	28	18	10
2017	38	21	17
2018	39	20	19
2019	51	28	23

KARL STORZ Group – Subsidiaries’ Initiatives

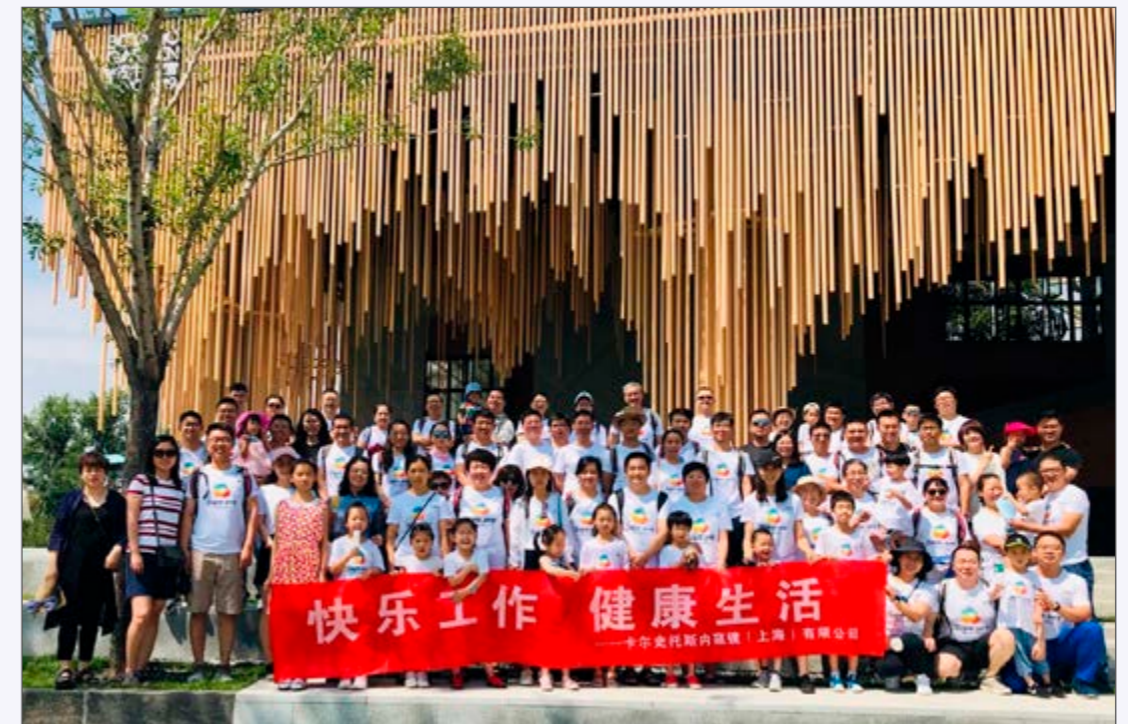
China: KARL STORZ takes staff and their families on an ecological civilization tour

To continue the tradition of “better work, better life” motto at KARL STORZ China, the KARL STORZ Beijing office organized a special family-day trip to visit the International Horticultural Exhibition 2019 Beijing (Beijing Expo).

The theme of Beijing Expo is “live green, live better”, which coincided with KARL STORZ values toward nature preservation, environment protection and people’s wellbeing. Integrating horticulture into nature and touching souls with nature were fully demonstrated in the 503 hectares of expo park area. 140 KARL STORZ staff and their family members observed the biodiversity, the co-existence of wetlands and woodlands, and the self-sustainability and self-sufficiency of the ecosystem.

To make the trip a learning and bonding experience, KARL STORZ staff planned and prepared group games, picnics, and children’s activities for the 140 people. Co-workers and their families got to know each other more through the group activities, whilst their children became immersed in the outdoors and the quality parenting time.

KARL STORZ China offices, including Xi’an, Nanjing, and others have been also regularly hosting company-wide outdoor activities to enable staff to regain the balance of strong body and clear mind, unleash the creative potential of human nature under the sun, and provide a healthy and sustaining cycle of working hard and living better.



KARL STORZ “better work, better life” family day started in front of the China Pavilion at Beijing Expo



Xi'an staff and their families group trip (August 2019)

China: “Trees or Forest” – KARL STORZ China 14-day corporate walking challenge

During October 2019, KARL STORZ China concluded a 14-day corporate walking challenge using mobile apps that connected all KARL STORZ China offices in 43 cities. The challenge was participated in by 435 employees, with total walking steps reaching 50,897,368 steps.

The mobile app randomly assigned all KARL STORZ China employees with a group number, so staff across offices formed virtual walking groups online and accumulated group walking steps in different cities at different times of their choosing. The app calculator then reported live and daily group progress as well as individual walking champions.

Walking steps accumulated by the group will then be converted to the number of trees that the KARL STORZ company will donate and plant in the western desert plateaus of China. Next year, 39 trees will be planted in Ejina in the name of KARL STORZ.

2019 marks the second annual corporate walking challenge organized by KARL STORZ China, in support of the “better work, better life” tradition that the company pursues. KARL STORZ walking champions brought their perseverance and sports spirit to work and to life, while at the same time contributing to the invaluable future of forestry in western China.

III. Support of education and apprenticeship training

Following up on our previous Progress Reports, we want to highlight our efforts in the area of education and apprenticeship training. The preservation of proven structures and concepts and the initiation of new projects demonstrates the great commitment of KARL STORZ to the field of apprenticeship training.

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 2019, we hired 42 trainees and 13 university students who are enrolled in a practice-oriented program at the Baden-Württemberg Cooperative State University (DHBW). In addition, 52 trainees and students successfully completed their training or university degree and we offered more than 90% of them an unlimited employment. Currently, there are a total of 180 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 to an afternoon event, where they receive a company tour and the opportunity to talk with representatives of the Human Resources department. This year, 40 participants attended the parent afternoon and learned about how KARL STORZ medical devices are manufactured at various workplaces. In the trainee workshop, they were familiarized with the work environment and tasks of industrial apprentices and could admire the first items made by the job entrants. While touring the Visitor Centre, parents additionally gained an impression of the wide range and variety of medical device and system innovations and were invited to try out the virtual reality simulators used by trainee surgeons to practice their hand-eye coordination.



The apprentices proudly showed their parents the various workplaces in the trainee workshop (November 2019)

Germany's best young surgical instrument makers: KARL STORZ is proud to have trained the national winner for the third time in a row

For his excellent performance, Dennis Mitecki, who completed his apprenticeship as a surgical instrument maker at KARL STORZ in the beginning of this year, was recently selected chamber winner and then state winner. With his final exam piece – a bone punch – he is now also national winner in the country-wide “Pros accomplish something” performance competition of the German craft trades, an award that honors him as one of the best young tradesmen in Germany.

Following an internship, Dennis Mitecki started his apprenticeship as a surgical instrument maker at KARL STORZ in 2015. Like all surgical instrument makers, he completed the Metals introductory course at the trainee workshop and was introduced to various skills such as laser welding, brazing, and off-hand grinding in the first year of his apprenticeship. From his second year onward, he rotated through various departments in Manufacturing and took additional courses, such as a CNC class. In the KARL STORZ trainee workshop, Dennis Mitecki intensively prepared for the practical final examination. The examination particularly tests manual skills in conventional cutting, off-hand grinding, joining techniques (laser welding/soldering/riveting), surface treatment, and assembly. Due to his excellent performance in the written and practical examinations, Dennis Mitecki is the 11th state and 10th national winner trained by KARL STORZ in recent years. This year alone, a total of 54 apprentices and university students successfully completed their training at KARL STORZ. This includes Florian Manger, the 2nd chamber winner and guild champion in the surgical instrument maker trade. Another winner, Leon Schmidt, was named guild champion in the precision mechanic trade. In recognition of their outstanding apprenticeship performance, Dennis Mitecki, Florian Manger and Leon Schmid were personally received and honored by Managing Director Karl-Christian Storz and Chair of the Supervisory Board Dr. h. c. mult. Sybill Storz.



Young talent Dennis Mitecki was awarded 1st place in the national championship of the surgical instrument maker trade in 2019 (November 2019)



Dennis Mitecki, Dr. h. c. mult. Sybill Storz, Florian Manger, Leon Schmidt and Karl-Christian Storz (December 2019)

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 which has been running 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 co-workers, 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 to 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. This year, 18 KARL STORZ apprentices and students completed an internship at Lebenshilfe.

The KARL STORZ management 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 numeracy and money, cooking and baking as well as through music therapy, etc.



In various areas of the Lebenshilfe association, KARL STORZ apprentices gain insights into the work and life of people with disabilities

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 a regular apprenticeship to 19 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 2018/2019, we conducted 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
- 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 informal and age-appropriate insights into technical occupations



KARL STORZ trainees with three students and the Director of the Leidse Instrumentmakers School (October 2019)

Exchange program with vocational school in the Netherlands

In cooperation with the vocational school Leidse Instrumentmakers School (LIS) in the Netherlands, which specializes in precision mechanics and medical technology, KARL STORZ again conducted an exchange program for third-year apprentices in surgical instrument making this year.

Unlike the dual education system in Germany, where vocational schools and companies collaboratively offer vocational training, separated into theory and practice, at LIS, both theory and practice are taught at the vocational school.

Three KARL STORZ apprentices traveled to the Netherlands for two weeks, and in return, three LIS students will visit KARL STORZ and the Tuttlingen vocational school Ferdinand-von-Steinbeis in January 2020. All costs for the exchange are covered by KARL STORZ and LIS.

The exchange program allows apprentices to familiarize themselves with the work environment of another culture that has a different vocational training system. Thanks to the cooperation with LIS, KARL STORZ can now for the first time offer a stay abroad for apprentices in the mechanical field.

IV. University cooperation projects

Collaboration with the Tuttlingen university campus – KARL STORZ Premium-Semester



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 Engineering Psychology and the Master programs Material Sciences, Mechatronic Systems and Medical Devices & Healthcare Management, 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 unique in the German university landscape. The Förderverein Hochschulcampus Tuttlingen e.V. [University Campus Tuttlingen 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, 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 annually for 10 years. In February 2016 the cooperation partners of this Private Public Partnership – the state of Baden-Württemberg, Furtwangen University and the University Campus Tuttlingen Association – renewed their agreement for the next ten years. Therefore, the financing of this outstanding university project will be assured up until 2029.



KARL STORZ additionally supports the Tuttlingen university campus as follows:

Premium semester: In 2014, KARL STORZ introduced the "USA Premium Semester". In the context of a competition, university students receive a technical task. The solved task and completed application documents are submitted to and evaluated by KARL STORZ. Two students with excellent results

and documents are 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.

In 2019, Jacob Richter was awarded the Premium Semester, which allowed him to gain insights in the development and production site KARL STORZ Endovision in Charlton, Massachusetts, for six months. After his return in September 2019, he summarized his experience as follows:

Jacob Richter
Student at Tuttlingen university campus – field of study Industrial MedTec

"My experiences were positive throughout, and whenever anything was unclear, a solution was always quickly found. Due to the perfect support, I was able to learn a lot of new things and gain important experience. The warm welcome I received at the Charlton site is particularly noteworthy. I was immediately made to feel at home in the team and at the subsidiary. Many great leisure activities resulted from that as well. Thank you for giving me the opportunity to spend my internship semesters in Charlton and for the trust you have placed in me."

KARL STORZ additionally supports the Tuttlingen University Campus as follows:

- **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 4th semester students**
- **Bachelor and Master thesis positions for students**
- **Working students' positions**
- **Industrial internships**

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.

The project aims to support up to 1.5% 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 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 2019, the company granted a total of 7 scholarships to students at the following universities:

- Since 2011: University of Ulm (1 scholarship)
- Since 2012: Pforzheim University (1 scholarship)
- Since 2013: Reutlingen University (1 scholarship)
- Since 2016: TU Berlin (1 scholarship), KIT Karlsruhe (1 scholarship)
- Since 2017: Stuttgart University (1 scholarship), Tübingen University (1 scholarship)

“Endoscopy” lecture series – elective at Furtwangen university

In October 2019, KARL STORZ offered for the sixth 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.

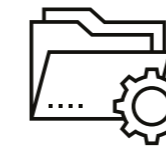
V. Continued education at KARL STORZ

Alongside external further training options, KARL STORZ provides internal opportunities for employees to engage in continued education in career-relevant topics.



Product-related training

To supply employees and sales partners with the latest product knowledge, 169 training events attended by 1,963 participants were held in 2019.



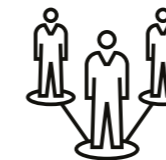
Project and change management training

Since 2014, KARL STORZ has been developing programs on project management to enhance employee expertise in this area. In 2019, 28 training events on this topic were held with nearly 221 participants in Tuttlingen and in the US.



Communications program & intercultural seminars

After the pilot phase was completed in 2016 and 2017, communications seminars and intercultural seminars are now offered to employees of the Tuttlingen and Swiss locations starting in 2018. The aim of the communications program and intercultural seminars is to increase the soft skills of all employees in order to improve their communication skills and cultural behavior. The program is offered to all employees of the German and Swiss locations. In 2019, 42 training sessions were held with almost 430 participants.



Leadership development

The PULS leadership development program fosters the management and leadership skills of managers. It aims to further professionalize leadership on the one hand and to visibly and sustainably further advance their individual areas of responsibility on the other. Since PULS started in 2016 there have been 7 different PULS runs with 90 participants in total.

In 2019 the pilot Communication Curriculum for managers was completed. 11 participants were part of the Curriculum which took place in 3 modules over 2 days. The program is designed primarily to foster the soft skills of managers and strengthen the exchange between the managers at KARL STORZ across the various departments as well as between the various leadership development programs. The learning groups that have been introduced are designed to anchor the learned topics in the company in a sustainable manner.



Internal IT training & language courses

In collaboration with Tuttlingen Volkshochschule (adult education center), KARL STORZ offers interested employees IT training on commonly used Microsoft Office programs as well as language classes in English, French, and Spanish. The training and instructional materials are paid for by KARL STORZ.

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 Director Karl-Christian Storz. As a family company with regional roots, KARL STORZ has been committed to 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. Environmental protection through innovative medical devices, advanced manufacturing methods and energy saving processing

Additive manufacturing using selective laser melting (SLM)

In conventional subtractive manufacturing methods such as milling and turning, the component geometry is produced by cutting material away from a solid block of material. In the process, most of the initial material ends up as shavings, and only a small percentage remains part of the workpiece. The shavings, which are contaminated with cooling lubricant, must then be recycled in a complex process.

In additive manufacturing using selective laser melting (SLM), the metallic powder is melted only where material is actually needed in the workpiece. Final machining of the generated component is done only where extreme precision is required. This near-net-shape production significantly minimizes the mass of generated shavings.

In 2019, KARL STORZ introduced selective laser melting (SLM) manufacturing technology at the Tuttlingen site. After qualification is complete, this machine will produce near-net-shape customer components.



Beam melting process © Fraunhofer IPK

Switch from Xenon to LED light sources throughout the product range

As of January 01, 2019, KARL STORZ completed the switch from Xenon to LED light sources throughout the product range in nearly all markets, and the company will complete the switch worldwide in the coming years. Switching from Xenon-based to LED light sources markedly reduces the lamps' energy consumption. In addition, the lamps' 60 times longer life eliminates regular lamp replacements. This reduces both resource consumption and environmental impact, for example due to the elimination of mercury and lead, which are present at least in small amounts in Xenon lamps.



A compact all-in-one system: TELE PACK + from KARL STORZ with an integrated LED light source that ensures long-lasting bright and uniform illumination

Certification in accordance with ISO 14001 Environmental Management Systems standard

For the sites Dr.-Karl-Storz-Str. 34 (Tuttlingen) and Take-Off Gewerbepark 83 (Neuhausen), KARL STORZ has successfully introduced an environmental management system on the basis of ISO 14001:2015. The introduction of this standard ensures, among other things, that the environmental impact, such as emissions, and the resource consumption of our products and activities are considered and improved where appropriate. Another objective of this standard is the continuous improvement of the company's environmental performance. An audit, which was documented in a report, determined that the management system meets the requirements set out in the standard. The ISO 14001 certificate was granted in October 2019.

Waste separation concept

As part of internal environmental and resource protection policies and the Commercial Waste Ordinance (Gewerbeabfallverordnung, GewAbfV), which requires separate collection and disposal of certain types of waste, KARL STORZ Waste Management introduced a new waste separation concept in 2014. Since then, the concept has been gradually expanded. In 2019, separate collection and disposal was implemented at all German KARL STORZ sites. In the past, separate collection and disposal particularly applied to residual waste and confidential documents. According to the new disposal concept, each KARL STORZ employee is to properly dispose of his or her waste in the appropriate waste containers in accordance with internal policies. In addition to the various production wastes, the following wastes will be collected separately:

- Paper and cardboard
- Residual waste
- Plastics
- Wood
- Electronic devices
- (Rechargeable) Batteries
- Metals
- Glass
- Spray cans

For each of these waste items, appropriately labeled containers are found at collection points located at the workspaces, in the specialist departments, or in the respective buildings.

KARL STORZ Group – Subsidiaries' Initiatives

Advanced Manufacturing

Traditional machining generates a significant amount of metal waste. Although this excess material can be recycled, the process is energy intensive and emits a large amount of CO₂. New manufacturing techniques offer a cleaner alternative. Near-net or net-shape technology such as additive manufacturing and metal injection molding reduce the material waste significantly. KARL STORZ Imaging has begun using impact-extrusion technology to fabricate equipment housings, knobs, and other components. The process uses fewer materials and resources without sacrificing performance. KARL STORZ is working to introduce these and similar technologies across all manufacturing sites to extend these benefits globally.

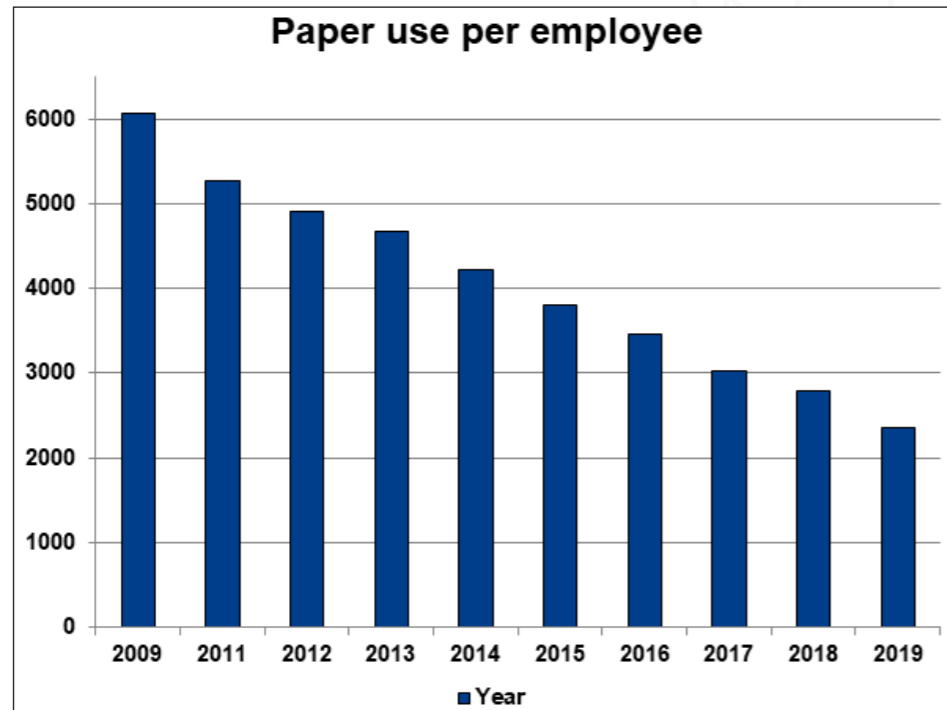
Streamlined Logistics

KARL STORZ opened a new distribution center in Auburn, Massachusetts. The site consolidates operations that were previously performed at separate locations. Most of the floor space is devoted to distribution and logistics, with additional room for conferencing and technology demonstration. Work areas were designed in consultation with the manufacturing staff to optimize efficiency, safety, and comfort. Ergonomic workstations, conveyor systems, high-capacity carousels, and other efficiency enhancements minimize product turnaround time while maximizing throughput. The new facility is relatively close to a major metropolitan center – Boston – which can reduce driving time for both commuting employees and products in transit. It also increases the potential for attracting a diverse workforce. With room to expand, the facility will help drive the local economy and sustain a highly skilled workforce.



Process efficiencies at the Auburn distribution center include an overhead tote conveyor, which keeps walkways clear and safe while preventing wasted effort

II. Reduction of paper use



KARL STORZ pursues the long-term goal of continuously reducing paper use by improving processes and thereby sustainably contributing to resource conservation. Since 2009, our average paper use has dropped from initially 6,100 sheets per employee to 2,351 sheets (-61.3%) in 2019. Compared to last year (2,791 sheets), this corresponds to a reduction of 15.8% per employee.

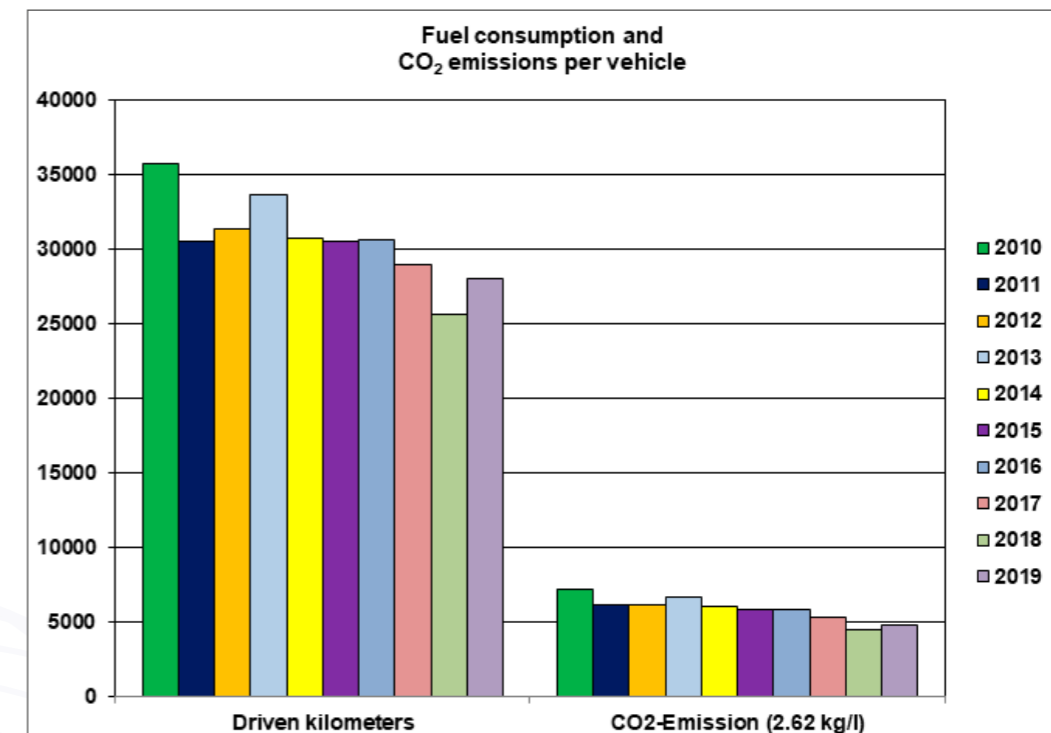
Digital attendance tracking and leave system

In March 2019, we established an HR Service Portal that allows employees at all German and Swiss KARL STORZ locations to create and edit leave requests and time events and to view their own time statements. In the past, leave requests for vacation or flexitime were first printed out, then manually signed by the respective supervisor, and finally forwarded to the HR department by in-house mail. Through the HR service portal, employees can now digitally submit their leave or home office requests. After the employee has submitted a request, the supervisor receives an email about their worklist containing applications to be approved. The digitization of the attendance tracking and leave system further reduces our internal paper use. This process improvement also eliminates the logistical process of mailing the application, thereby further reducing our CO₂ footprint.

III. Company Fleet: Fuel consumption and CO₂ emissions

Company	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total kilometers driven	6,494,594	6,256,525	7,051,607	7,127,941	7,085,096	7,057,877	6,744,900	6,660,749	5,438,713	6,471,872
Kilometers driven per vehicle	35,684	30,519	31,340	33,622	30,671	30,554	30,659	28,960	25,654	28,017
Average fuel	7.63	7.67	7.45	7.51	7.46	7.26	7.26	6.94	6.58	6.46
Total CO ₂ emissions (2.62 kg/l*)	1,298,955	1,257,333	1,376,070	1,403,128	1,383,900	1,342,415	1,283,434	1,210,597	936,945	1,094,996

*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 since 2012, many more cars could be analyzed than in 2011 – which is the primary reason for the significant increase in driven kilometers.

Since 2013, the average fuel consumption per car has dropped, and in 2019, it reached the lowest average so far, at 6.46 liters per 100 kilometers. This equals a reduction of 1.7% compared to the previous year. CO₂ emissions rose by 6% because of the increase in traveled kilometers. The 2019 analysis is based on a total of 231 vehicles (2018: 212 vehicles).

IV. KARL STORZ bicycle leasing program



Cycling is popular and a good way to offset the typically sedentary office work. With the introduction of a company bicycle leasing program in June 2017, KARL STORZ offers employees an attractive mobility option that actively contributes to health, to reducing traffic, and to protecting the environment.

For this purpose, KARL STORZ cooperates with a bicycle leasing company and thereby enables KARL STORZ employees to conveniently finance their favorite bicycle (regular or e-bike up to 25 km/h) through lease payments. Instead of paying directly at the store, for a term of 36 months, part of the monthly gross salary is withheld as a so-called salary conversion to pay the leasing rate to the bicycle leasing company. The salary conversion reduces taxable income and social security contributions. Only the monetary advantage (1% of the gross list price of the bicycle) remains tax relevant. In total, employees can save up to 30% compared to purchasing the bicycle in cash.

Since the introduction of the program, 414 individual leasing contracts have been entered into.

KARL STORZ employees for climate-friendly mobility

From July 1st to the 21st, 2019, another round of the *STADTRADELN* (City Biking) climate alliance campaign was held: In the category of cities with less than 49,999 inhabitants, Tuttlingen this year took a surprising 1st place on the state and national level with 363,381 kilometers traveled. Added up, the kilometers biked by all Tuttlingen teams during the City Biking event were enough to travel nine times around the globe.

The KARL STORZ Aktiv company sports group recruited a team of more than 100 active cyclists this year as well; in the 21 days of the event, they traveled a total of 23,419 km by bike. The team took 4th place in the Tuttlingen competition overall and 2nd place in the Companies category.

“By participating in the campaign, we want to motivate as many employees as possible to use their bikes. The main goal is to have fun, to establish the bike more firmly as a mode of transport in everyday life, and to thereby make a small, but important, contribution to protecting the climate,” commented Nader Hassanzadeh, president of the KARL STORZ Aktiv company sports group.



Recognition for kilometers biked: The winning teams and best individual cyclists at the award ceremony of Tuttlingen City Biking 2019 (September 2019)

Global Compact Principle 10: Anti-corruption

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

I. Continued dedication with information and training

Our framework for ethical conduct

The KARL STORZ family-owned company is committed to sustainable corporate governance based on ethical values such as compliance, honesty, loyalty, transparency and fairness.

These values are firmly anchored in our corporate culture. They provide the principles for preserving our excellent reputation and for maintaining the trust of our markets, the public and our employees.

The company founder, Karl Storz, put these values into practice on a daily basis. He laid down the foundation of our company culture, thereby handing us an important key for the long-term and sustainable success of the company KARL STORZ.

As KARL STORZ operates globally, we have to follow a variety of binding rules and regulations of many different countries in our day to day business. Wrongdoing can be a matter of concern of multiple jurisdictions leading to penalties and even criminal convictions that involve major fines or governmental sanctions.

It is a clear mission statement of our Executive Management that KARL STORZ also stands for lawful and ethical business practices and zero tolerance for unethical or even illegal conduct.

Therefore, it is the responsibility of each individual employee and business partner to

- preserve the excellent reputation of KARL STORZ and further strengthen it through positive actions,
- to continuously maintain the trust our customers have placed in us, and
- to prevent the company from being exposed to any illegal or unethical activities.

The KARL STORZ Compliance Management System supports our employee and business partners in their responsibility towards the company. This system is built on three pillars: Prevent, Detect, Respond. Each pillar handles a detailed and thorough system of activities by which it is intended to ensure that KARL STORZ acts completely in accordance with applicable laws and regulations as well as its own policies.

Prevent



For preventing Compliance breaches a clear and transparent understanding of binding rules is mandatory.

To KARL STORZ and our employees, observing anti-corruption guidelines as well as compliance requirements is not a project with a start and end date but an integral component of all business activities. On the KARL STORZ website under the category "Compliance", business partners can find out anytime about the basic principles we practice, with references

to the Global Compact, the KARL STORZ anti-corruption guideline as well as environmental and resource conservation.

Moreover, business partners are used to sign the KARL STORZ Third Party Code of Conduct when they start to do business with KARL STORZ. It is KARL STORZ's uncompromising expectation that Third Parties shall respect the key elements of KARL STORZ's values and principles. Such understanding forms the basis of the business relationship between KARL STORZ and its business partners.

Employees are asked to follow the principles in the KARL STORZ Code of Conduct for employees. The Code is available to every employee in multiple languages and presented on their first working day. Regular training on the Code enables employees to behave the right way and to include the KARL STORZ principles in their daily business.

In order to support employees exposed to high-risk fields in terms of corruption, there is a special Compliance training for this group to raise understanding and awareness.

It is important that KARL STORZ continues to monitor Compliance risks in a changing work environment. The KARL STORZ Compliance Risk Management is a program that allows KARL STORZ to take preventive actions in any area where Compliance risks might occur. This global approach raises awareness among all employees and provides guidance in the strategic decision process.

Detect



Compliance infringements have to be fully clarified in order to prevent reoccurrence and in case of an illegal conduct to rigorously pursue such a violation. This is a substantial part of our Zero Tolerance Strategy.

Compliance regulations require a systematic neutral handling and filing of compliance cases. Therefore, the Compliance department is responsible for handling every reported case that could represent a potential contravention of the Law, Code of Conduct or KARL STORZ Policies.

In order to become aware of potential violations, KARL STORZ implemented a Compliance Hotline globally. This hotline is available 24/7. It is possible to submit concerns online, by phone or via a Manager Incident Respond Form. Not only KARL STORZ employees but also KARL STORZ business partners or other third parties can share any concerns via this tool that can publicly be accessed via the KARL STORZ website.

Moreover, the Compliance department conducts regular checks in high-risk areas where corruptive actions could occur. Without a positive compliance check an approval for special business cooperation is not possible.

Respond



KARL STORZ follows a Zero Tolerance Strategy when severe compliance violations occur. Following this mission statement, the Compliance department suggests suitable and appropriate sanction measures if compliance violations are clearly identified, examined and evaluated.

If compliance violations reveal systematic deficiencies or structural failures, the Compliance department supports the business units to improve their processes by training sessions, policies, definition of new workflows and other remediation measures.

Applying lessons from past compliance cases improves our Compliance Management System continuously. Therefore, our policies and training sessions are regularly reviewed, adapted and communicated to the target groups.



WE SUPPORT

STORZ
KARL STORZ — ENDOSKOPE