

PARTICIPANTS BROCHURE

BUSINESS DELEGATION TO JORDAN

RENEWABLE ENERGY,
WASTE AND RECYCLING

GIZ RESPONSIBLE & INCLUSIVE BUSINESS HUB | MENA

SEPTEMBER 2017



Implemented by **giz** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



COOPERATION PARTNERS



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 SOLAR

 RECYCLING / WASTE

 CONSTRUCTION CONSULTING

ABOUT

The aim of the business delegation is to provide participating German companies with thorough insights into the Jordanian business environment and market opportunities in the respective industries. Through sector-specific field-trips and site visits participants will get a detailed picture of existing solutions and potential for new solutions and market needs. Further, it is foreseen to enable business-to-business meetings with Jordanian companies as well as introduce the participants to key stakeholders from the local, national, and international public and private sector.

BACKGROUND

The Jordanian government and international donors alike have a strong interest in significantly expanding the share of renewable energies. Further, various programs of German and international development agencies support the national and municipal governments in the development of a modern waste management system. A key for success will be the cooperation with national and international private sector expertise, knowledge, and services.

Opportunities for German SMEs and for business partnerships between local and German companies exist in the renewable energy sector, especially solar, wind and biomass, in the use of biogas, waste management and recycling technology and know-how, as well as environmental consulting services.

GIZ is organizing this business delegation with the aim of creating a win-win situation: supporting German businesses in identifying new market potentials but also attract German private sector know-how and investments in order to leverage the support of the German government to Jordan in the important sectors of renewable energy supply, waste management, and green growth efforts of the Jordanian government in general.

This business delegation has a "non-traditional" approach and is closely coordinated with the organizations of German development cooperation in Jordan. The numerous international and Jordanian experts working in German development cooperation will serve as a valuable resource for German companies to receive access to Jordanian expertise and decision-makers through the GIZ network and partners in Jordan.

The German Federal Ministry for Economic Cooperation and Development (BMZ) offers a wide range of funding and support programs that help German companies to enter the Jordanian market and to minimize risks, e.g. in direct cooperation with local GIZ projects or in a development partnership within the framework of the develoPPP.de program. It is also foreseen to elaborate on these opportunities and explore concrete partnership models in a half day workshop.

ORGANIZATION

The business delegation is organized by the GIZ project "Responsible and Inclusive Business Hubs (RIBH)" in cooperation with relevant projects of the GIZ Jordan, the German-Arab Chamber of Industry and Commerce, the German RETech Partnership e.V., and the German Solar Association (BSW).

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AUTARSYS

Autarsys GmbH is a company founded in 2013 with 2 shareholders: Matthias Ross and Erich Bosch (as GM of Renewable Storage GmbH). Autarsys provides containerized energy storage systems (ESS) for off-grid and on-grid applications at a competitive price. On-grid application include primary control power, energy arbitrage and peak-shaving, for example smoothing the grid integration of medium and large-scale PV plants. In off-grid areas Autarsys ESS allows to enhance the share of renewable energies in hybrid systems (solar PV or wind / diesel genset) to go up to 90%. Compared to pure diesel-based energy supply the ESS with re-newable energy sources provides power at average 30% less costs.

The Autarsys ESS has grid-stabilization functionality including voltage regulation, provision of reactive power and harmonics cancellation to improve the power quality for the customer. Autarsys ESS comes in 30 kW up to 10 MW and multiples, pre-tested and pre-installed in 8', 20' or 40' HC containers with the latest generation of utility grade Lithium-ion battery cells and modular inverter system including active power filter.

Depending on your requirements, the Autarsys team accompanies you for the entire duration of your project period – starting with project development and moving through planning and implementation up to commissioning and then finally maintenance.



Dominik Kemmerer, Sales Manager for Autarsys GmbH Energy Storage Systems since October 2016. He is mainly responsible for the MENA Region. Kemmerer is an experienced and successful sales, marketing and business development manager with over 20 years in the renewable energy sector. He also has specialist knowledge of the Italian renewables market, specifically about biomass and solar (photovoltaic and solar thermal). He is a team player with excellent inter-personal and cross-cultural skills; his mother tongue is German and he is also fluent in Italian and English.

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FOSERA

Fosera develops and manufactures Solar Home Systems, with highest quality standards and a lifetime of over 10 years for rural electrification. With the systems, easy and affordable access to modern electric energy for lighting, communications and consumer electronic is granted.

The headquarters of Fosera was founded in 2011 near Ulm in Germany. Aside the operation in Germany where R&D, sales, marketing and management tasks are performed, an international business network has been established, which takes care for the supply chain, production, logistics and after sales service. The main production plant is located close to Bangkok in Thailand, but also assembly line and repair centers in Ethiopia, Kenya and Liberia, which bring knowledge, local value creation and customer service close to the end-users.



Prof. Peter Adelman has been active in Photovoltaic since 1983. In 2011 he founded fosera GmbH & CoKGaA. Furthermore, he founded the solar department of Steca (1990 – 2000), Photocos AG (2000-2008), he is the founding director and CEO of the Institute for Decentralized Electrification, Education and Entrepreneurship (id-eee) (since 2012), of BOS AG (since 2014) and of DIRECTORS of NEXOL AG (since 2016). As a senior consultant, he has been working for GIZ, Worldbank, the UN and other donors. In academia, he has extensive experience as a lecturer and professor at the “University of Applied Science Ulm” (since 2003) and was a Guest Professor at various Asian and African Universities. He is a member of the IEC norming committee (WG3 – solar components).

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MULTICON SOLAR

For 10 years, the Multicon Group has been realizing innovative photovoltaic solutions. The central business activities are the development, production and assembly of solar power plants. Multicon has specialized in mobile off-grid solutions since 2010. Power is generated on the road using the newly developed solar container and Trailer. Multicon was awarded with the Energy Globe World Award for its innovative mobile solar plants. Since 2013, Sven Leinardi (Executive Manager) is responsible for developing (mobile) renewable off-Grid solutions for remote areas, camps and agricultural applications.



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SUNSNIFFER

SunSniffer is a module-level monitoring and analysis solution for photovoltaic systems. Digitalization through accurate measurements from the field along with machine-learning algorithms and sophisticated data analysis allows simple instructions on how to improve the overall system performance down to each module to be given. SunSniffer makes the shift from preventive to predictive maintenance thus decreasing overall O&M costs while increasing the yield of photovoltaic plants.



Omar Farwagi completed his Bachelor of Science Energy Engineering from the German Jordanian University (GJU) in Amman, Jordan. He participated in local and global science projects. The most noteworthy of them include institutes like INTEL ISEF, Massachusetts Institute of Technology (MIT), and the Office of HRH Crown Prince Al-Hussein bin Abdullah II. Omar's main responsibility is managing the development of both hardware and software products of SunSniffer.

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BSW-SOLAR

With about 850 member companies, the German Solar Association (BSW-Solar) is the most important national lobby organization for Photovoltaics and Solar Thermal in Europe. Forming a strong community of companies, BSW-Solar acts as an informant and intermediary between business and the political and public sectors. It represents the common commercial interests of businesses within the solar energy value chain. As the voice of the solar industry, BSW-Solar has strongly contributed towards creating the world's leading and most stable market through policy advocacy and campaigns for solar energy.



Ahmad Sandid is a business analyst and strategy specialist with professional expertise in consulting, project management, market entry, business development, marketing and finance. On April 2016, Ahmad joined the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and has been seconded as a Development Cooperation Advisor (EZ-Scout) to the German Solar Association (BSW-Solar). Before working at the GIZ, Ahmad worked as senior business consultant for renewable energy for more than 5 years at the Berliner consulting firm, hogrefe Consult. He holds a Master's degree (M.Sc.) in Economics and Business Administration from the University of Potsdam, Germany.

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ADELMANN

ADELMANN Umwelt GmbH (www.adelmann.de) is a global player specializing in recycling technology, i.e. in the development, production and distribution of innovative machines, lines and technologies de-signed especially for the recycling industry. For almost 50 years, the 1967 founded company based in Karlstadt acts as service provider, system supplier and solution finder for the company's customers from all over the world.

Due to its many years of experience and well-founded expertise, ADELMANN Umwelt GmbH stands for competent counsel and sophisticated performance. Its connection to the Systec Group enables ADELMANN Umwelt GmbH to resort to manifold assembly and technology resources and hence maxim-ize the customers benefit.

Udo Schauer was born in 1954 in Leipzig/Germany. He studied mechanical engineering and business administration at Wilhelm-Pieck University in Rostock/Germany and graduated as engineer (Diplom-Ingenieur).

At the beginning of his career, Udo Schauer specialized in fuel technology in the field of power plant construction. From 1986 to 1996, he held the position as manager of Mitteldeutsche Feuerungs- und Umwelttechnik GmbH Holzhausen/Germany.

From 1996 until 2000, he was a management board member of Riesaer Beteiligungs- und Aktiengesellschaft before he joined the recycling company ASS Adolphs Sieben und Separieren GmbH. In his function as chief executive manager of this company from 2001 to 2008, he planned and implemented the new construction and operation of an electronic recycling line at the German Krumpa site and gained extensive in-depth know-how in this field.

Since 2009, he has been working as technical manager of ADELMANN Umwelt GmbH and as chief executive officer of SPREELAST GmbH (production of pellets and rubber powder).



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BLACKFOREST SOLUTIONS

BFS consists of highly specialized consultants for waste management operations worldwide – from single consulting services for local companies and authorities to turn-key solutions for e.g. whole military camps. Regardless of the amounts or types of waste to deal with, BFS always guarantees a professional and integral transportation or local disposal solution, following international regulations like the Basel Convention standards.

Apart from the worldwide export of hazardous waste types, BFS offers onsite facility assessments and design consultancy for MSW, medical waste, hazardous waste and WEEE especially in emerging markets and under special working conditions.



Mr. Kevin Negoro Kasih is the Co-Founder and Managing Director of BlackForest Solutions GmbH, a waste management consultancy with an operational focus on the MENA region, based in Germany. Based on his technical specialization on mechanical analysis, construction planning and combustion machines, Mr. Kasih started as technical assessor for recycling and disposal facilities in the fields of WEEE, MSW and hazardous waste in Germany. With the BlackForest Solutions team, Mr. Kasih nowadays offers high standard technical consultancy and operational services, especially in challenging environments.

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CYCLOS

Cyclos GmbH is one of Germany's leading waste management and material flow consulting companies specializing in strategy and policy development, auditing and compliance assurance as well as research. cyclos employs 14 publicly appointed and sworn experts on packaging and electronic and electrical equipment waste. Clients include municipal waste management authorities, private enterprises, government entities on federal and state level and industry associations

Selected services of cyclos GmbH.

- Strategic consulting and development of waste management, disposal and prevention concepts for municipalities, private enterprises and industry associations
- Studies and research for government authorities with regard to packaging waste recycling
- Information and guidance of policy makers, industry actors and government ministries in the development and application of waste management legislation
- Overseeing auditing and compliance verification by certified experts in the following areas:
- Current research and development topics: design for recyclability in packaging, design for recyclability of electric and electrical appliances, textile recycling



Agnes Bünemann, Managing Director, cyclos GmbH/ Managing Director, Institut cyclos-HTP GmbH.

Appointment as publicly certified expert on packaging disposal and WEEE disposal (including used batteries), appointed by the Chamber of Commerce and Industry (competent: Chamber of Commerce and Industry Osnabrück – Emsland – Grafschaft Bentheim), 2003
Studied at the University of Osnabrück: Geography, and Studies of Mathematics

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Nazih Musharbash was born in Amman, Jordan, and grew up in Bethlehem and Beit Jala/Palestine. He studied pedagogy, biology and chemistry in Lower Saxony. Activities as teacher in Lower Saxony and Amman. Head of a junior high school in the district of Osnabrück until 2008. General sworn interpreter and authorized translator for the Arabic language. He is author of the photo book: "Jordan - The whole Orient in one country" and now lives in Lower Saxony and Amman. At cyclos GmbH Mr. Musharbash is the contact person for projects in Arab countries.

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ESE

ESE, as part of the RPC Group PLC, is Europe's leading manufacturer of temporary storage systems for waste and recyclables. The product range contains 2- and 4-wheeled bins, litter bins, UWS and SUWS waste systems, hazardous waste containers and more. ESE provides customers with the most efficient systems by combining over 80 years of experience. With head office in Maastricht, three production sites for plastics and steel in Germany and France as well as several sales offices in Europe, ESE sells their products worldwide and achieved a turnover of more than 200 Million EUR in 2016.



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SCHLEGEL

As a professional and independent consulting engineering company, Regierungsbaumeister Schlegel (Schlegel Consulting Engineers) provides comprehensive advice and a broad range of technical services to all areas of civil engineering, water resources management and infrastructure. The privately held company acts exclusively in the interest of its customers.

Water Resource Management:

Water Supply and Waste Water Management, Sludge Treatment, Sewage Systems, Stormwater Management, Hydraulic Engineering

Infrastructure:

Traffic Systems, Traffic Development, Airports, Railway & Highway Bridges, Roads & Hardstandings, Re-mediation of Contaminated Land, Landfill Management, Surveying

Operational Equipment:

Systems & Facility Engineering, Electrical Engineering, HVAC Technology, Process Control, Information Technology, EDP

Project Management:

Time & Cost Control, Project Coordination, CDM Coordination, Health and Safety Management



From 2015 to 2016 Mr. Schlegel worked at the Department of Hydraulic and Water Resources Engineering and was involved in the management of flood liable land in an informal settlement in Haiti at Technische Universität München. From 2016 until now he works at Regierungsbaumeister Schlegel GmbH & Co. KG in the department of Stormwater Management and Hydraulic Engineering. His activities comprise project management, consulting and constructional monitoring. His thematic focus is on urban flood protection, flood risk analysis, catchment management, water and wastewater infrastructure.

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GERMAN RETECH PARTNERSHIP

The German RETech Partnership is an independent network of companies and institutions operating in the German waste management and recycling sector. It aims to promote worldwide technology transfer and provide access to German expertise. Please contact RETech if you are interested in cooperating with the German waste management and recycling industry. We will help you to find the right partner for solutions 'Made in Germany'.



Mr. Markus Lücke is a civil and environmental engineer from Germany, with more than 30 years of professional experience. Between 1986 and 2001 he worked with the public and private sector in different positions on infrastructure, urban planning, environment and international cooperation. He gained long lasting work experience in Germany, Yemen, Syria, Indonesia Palestine and Tunisia. Since 2001 he has been working with the Gesellschaft für Internationale Zusammenarbeit (GIZ). In the frame of the BMZ financed EZ-Scout Programme he is currently seconded to the German RETech Partnership as an advisor for international cooperation in the recycling and circular economy.

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UNIVERSITY OF ROSTOCK

PD Dr.-Ing. habil. Abdallah Nassour is associate professor at University of Rostock at the Faculty of Agricultural and Environmental Sciences. He is working in the department “Waste Management and Material Flow” with a focus on his area of expertise in waste management in the Arab world.

The overall aim of the research group relates to the increasing importance of careful handling of our natural resources and their conservation. Against the backdrop of increasing energy costs and waste volumes worldwide, the research group “Waste Management and Material Flow (Abfall- und Stoffstromwirtschaft, ASW) is primarily concerned with questions of optimizing material and energy recovery of bio- and secondary raw materials. The realization of energy-efficient material cycles across the entire value-added chain makes a significant contribution to resource conservation - and thus to environmental protection.



Ass. Prof. Dr.-Ing. habil. Abdallah Nassour was born in 1962 in Syria. He studied Mechanical Engineering and in 1993 graduated as PhD at the Institute for Manufacturing Engineering of the University of Rostock in Germany. In 2005 he completed his professorial dissertation at the Department of Waste and Material Flow Management of the University of Rostock in Germany on "Approaches to reform the waste management in developing countries".

His present position is Associate Professor at the department Waste Management and Material Flow of University of Rostock in Germany, Managing Director of ENVERO GmbH "Spin-off from the chair of Waste Management and Material Flow of the University of Rostock".

He has more than 20 years' experience in the waste management field in Germany, MENA and the Gulf region.

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AJG

(Represented by Bjarne Bächle, Regierungsbaumeister Schlegel)

AJG are independent engineers and architects with more than 60 years of experience.

Main activities are:

- Architectural overall planning and related services
- Consultancy services for sustainable buildings under aspects of energy consumption and saving

With its main location in Munich, AJG has a branch-office in Dubai/ UAE and Erbil/Iraq having a special expertise in the analysis for the protection and safety of buildings (e.g. blast, bombing, impact, missile and other attacks, seismic engineering, fire).

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