Private Sector Involvement in Sustainable Development:

Green Buildings

GFSE Policy Brief

February 2016

Why the private sector matters for sustainable development

The adoption of the 2030 Agenda for Sustainable Development in September 2015, which set 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, ensure affordable and clean energy and tackle climate change by 2030, marked a paradigm shift in international efforts for sustainable development.

These SDGs target developing and developed countries alike and address all pillars of sustainable development: social, economic and environmental. The Agenda 2030 clearly recognizes the important contribution of the private sector to achieving the goals, and calls on "all businesses to apply their creativity and innovation to solving sustainable development challenges". Private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation. A global partnership is sought to implement the SDGs and its 169 targets, encompassing governments, the private sector, civil society, the UN system and other actors.

Apart from the SDGs, an increasing number of global initiatives are actively trying to involve the private sector in the sustainable development agenda: The Sustainable Energy for All (SE4All) initiative's energy efficiency campaign "We Commit" aims to encourage companies to take a leading position in reducing energy-related emissions through voluntary commitments. The UN Global Compact supports companies to align their strategies and operations with human rights, labour, environment and anti-corruption principles to develop innovative solutions to address poverty and inequality issues.

Through the creation of effective Public Private Partnerships (PPPs) and new forms of cooperation, the private sector can be engaged in developing innovative solutions for key areas, lending expertise and mobilising financial resources. Many companies have already realized the importance of including sustainability aspects in their business models and engaging in initiatives that expand local capacities and support development in sectors and areas where they operate.

The building sector is of particular importance to sustainable development: Buildings currently account for about one third of global CO₂ emissions. Rapid population growth, urbanisation and the need for new infrastructure can aggravate the situation and create lock-in effects in unsustainable long-lived infrastructure. Green buildings offer a cost-effective way to reduce building energy consumption, provide comfortable living space and tackle climate change. Developing and emerging economies, however, face a number of barriers for the deployment of renewable energy and energy efficiency technologies and services. The challenges in the building sector include the lack of energy conservation building codes (ECBCs) and effective legal mechanisms to implement these, administrative hurdles such as inadequate capacities, resources and unclear responsibilities, a general lack of knowledge on sustainable buildings, tools and best practice examples in the sector, and financial challenges. The lack of compliance mechanisms, non-availability of information on sustainable building materials, available expertise and the benefits of green buildings also complicate the implementation of green building solutions.

Private companies can contribute to the greening of the building sector by offering expertise in sustainable building design and construction, innovative technical concepts, sustainable building materials or financial resources.

The Global Forum on Sustainable Energy (GFSE) is a neutral multi-stakeholder platform which is facilitating international dialogue on energy for sustainable development by taking into accounts the special interests and challenges of developing countries. GFSE aims at the establishment of a sustainable world energy system from a social, economic and environmental perspective.

GFSE contributes to both international discourse and information dissemination on sustainable energy. The multi-stakeholder platform plays a crucial role in facilitating sustainable energy projects by bringing together donors, investors and project developers. Their interaction creates new opportunities and enhances existing initiatives in the field of sustainable energy.

Buildings currently account for about one third of global CO2 emissions, and rapid population growth and urbanisation can aggravate the situation. Private companies can contribute to solutions by offering expertise in sustainable building technologies and practices.

Austrian know-how for international endeavours

Austria has been a benchmark country for energy efficient, sustainable buildings in Europe for more than 20 years, a development which started already in the 1970s and was supported through extensive research activities, support mechanisms and initiatives. Some of the current initiatives are "Haus der Zukunft - Building of Tomorrow" or the klimaaktiv Austrian climate protection initiative. "Haus der Zukunft -Building of Tomorrow" is a research and technology programme of the Austrian Ministry of Transport, Innovation and Technology (BMVIT), which shall provide the basis for innovative, sustainable building concepts. Klimaaktiv is the climate protection initiative of the Austrian Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW). The building and renovation component focuses on energy efficient construction and high quality building renovation in line with the klimaaktiv building standard, which is based on comprehensive sustainability criteria. In a comparison with other rating systems, buildings complying with the klimaaktiv building standard contribute most reliably to climate change mitigation. A database presents best practice examples of sustainable construction and renovation and highlights one outstanding example each month.

Austrian companies in the environmental and energy technology and services industry are well known for their innovative and future-oriented technology and holistic approach. Especially enterprises in the building sector have a lot to offer to international partners, offering expertise in the conception of buildings, the production and resource-friendly use of energy and construction materials, sophisticated technologies like integrated passive house technologies and concepts, which substantially reduce or eliminate the need for active energy use, or building refurbishment and renovation to enhance the efficiency of the existing building stock.

The portfolio of expertise comprises:

- Civil engineering, planning and construction of energy efficient buildings in line with latest technological findings
- Innovative construction techniques such as passive house technology and plus-energy multi-storey buildings
- Innovative technologies from cutting edge ventilation systems to renewable energy technologies like biomass based heating systems (modern firewood boilers, wood chip furnaces, pellets etc.), heat pumps and solar thermal systems
- Sustainable construction materials ranging from solid building components to sustainable and highly efficient insulating materials (e.g. polyurethane, expanded or extruded polystyrene, polyethylene and Styrofoam panels, as well as regenerative materials) and windows, insulating glass and glazing.

Austrian expertise also encompasses the design of energy policy frameworks for green buildings, the conception of the corresponding support schemes as well as capacity building and training for the enforcement of energy efficient building codes, among others. With the Global Forum on Sustainable Energy (GFSE), Austria has an international network of policy-makers and experts for energy in the service of sustainable development. Members of this network can easily be mobilized to support specific green building initiatives.

Austrian companies are well known and in demand for their innovative and future-oriented technology and holistic approach. Especially enterprises in the building sector have a lot to offer!

Why and where to engage

Private sector engagement in sustainable development might follow profit-related or non-profit motivation. Non-profit motivation often emerges from considerations of Corporate Social Responsibility, an enterprise's initiative to assess and take responsibility for the company's effects on environmental and social wellbeing. Profit-oriented engagement in developing countries and emerging markets is complicated by insufficient market information, an unstable investment climate, weak protection of intellectual rights and low expected rates of return, leading to a generally high risk perception. Profit orientation does not have to exclude business activity from contributing to beneficial development outcomes, but special business and partnership models might be necessary to achieve both objectives simultaneously.

Cooperation with local public partners through private-public partnerships (PPPs) and with international partners through a wider initiative or programme may mitigate uncertainty and risk and create a favourable investment climate. Through PPPs, private and public actors can create synergies by making use of their respective comparative advantage, be it economic expertise and technical innovation, or the provision of public services and reliable framework conditions.

Engagement in international initiatives may offer the advantages of participating in a global renowned endeavour and relying on a strong network of internationally experienced partners, which helps tap into new markets and mitigate risks in developing and emerging markets, provides assistance and inspiration in developing innovative business models and new product or service lines. Austrian enterprises in the building sector can participate in international initiatives by offering expertise, technical solutions like nearly zero energy buildings or solar thermal systems that might be combined with training measures, or might directly react to a request from a developing country for technology of knowledge provision. Partnering directly with local companies in developing countries and even commercial activities to construct green buildings may receive support and recognition from one of the Austrian instruments.

A number of international organizations and initiatives actively seek to involve the private sector in their development efforts, and Austria as well has a lot to offer - both in terms of expertise and support instruments for enterprises.

International Initiatives

SE4All Global Energy Efficiency Accelerator Platform

The SE4ALL Energy Efficiency Accelerator Platform is a public-private partnership programme established to scale up energy efficiency policy, action and investment to double the global rate of improvement in energy efficiency by 2030. The platform enables governments to engage with global and local stakeholders knowledgeable of technologies, markets, financial instruments and implementation approaches to scale up energy efficiency actions in different sectors. There are seven accelerators focusing on transport, lighting, appliances, district energy systems, buildings, industry and finance.

The **Building Accelerator** shall help city, state, regional and national governments speed up adoption of best practice policies and project implementation. The SE4ALL network of businesses, NGOs, international organisations and civil society will provide tools, expertise, technical capabilities and financial support to achieve these objectives.

Joining the platform can be interesting for companies providing energy efficient technologies or expertise, which would like to expand their professional network and engage with public and private partners to develop scalable solutions.

GFSE offers additional information about the buildings accelerator platform.

More information: http://www.se4all.org/energyefficiencyplatform/

Climate Technology Centre and Network (CTCN)

The CTCN promotes the transfer of environmentally sound technologies for sustainable development at the request of emerging and developing countries. Through its network, the CTCN provides capacity building, technology solutions, advice on regulatory, legal and policy frameworks as well as implementation advice on a case-by-case basis. Network members comprise a wide range of climate technology stakeholders, ranging from academia, finance, non-government actors, private and public sector and research entities to National Designated Entities.

Membership benefits include:

- Commercial opportunities pre-qualified access to competitive bidding for technical assistance services
- Global network to expand partnership opportunities, learn from peers and learn faster about emerging activities
- Visibility enhance the company's global recognition and geographical scope, and showcase experience and success stories

Membership criteria include an institutional structure; demonstrated capability in initiatives aimed at development, transfer and deployment of climate technologies; operational and organisational stability, and a pledge to comply with the CTCN Code of Conduct. New applications are continuously reviewed, and the membership will be valid for a renewable term of two years.

Learn more: https://www.ctc-n.org/network

World Green Building Council (WorldGBC)

The WorldGBC is a network of national green building councils in over 100 countries, enabling green buildings and sustainable communities through market transformation and leadership. It aims to strengthen these councils by providing them with tools and strategies for strong organisations and national leadership positions, and establishing a network of knowledge, inspiration and practical support.

Green building councils are member-based organisations empowering industry leaders to effect the transformation of the local building industry toward sustainability. Members have access to a number of knowledge resources, can apply for joint project funding bids and participate in WorldGBC programmes, and many more.

The WorldGBC's campaign "Better Build Green" at the COP21 climate conference in Paris in December 2015, committed to mobilising a global market transformation in order to advance by 2030 and achieve by 2050 the two goals of (i) net zero carbon new building, and (ii) energy efficiency and deep refurbishment of existing stock.

More information at: www.worldgbc.org and www.betterbuildgreen.org

Global Alliance for Buildings and Construction (GABC)

The alliance was launched at the COP21 in Paris, and aims to bring together countries, cities, public and private organisations of the building sector value chain to scale up action towards the achievement of the global 2°C climate goal. Initiating partners of the alliance have made commitments to this end, and are seeking further stakeholder engagement. Collaboration within the alliance addresses the development of comprehensive building efficiency strategies and policies, action plans across the entire building value chain, including workforce development, capacity building and support for technology transfer, and increasing finance options. Members (e.g. private companies) can actively participate in initiatives of GABC, provide expert advice and engage key stakeholders in developing and implementing "below 2°C" pathways goals or plans. The BMLFUW is a member of GABC.

For information on joining the alliance as a member, please contact buildings.day@unep.org

Other programmes dealing with sustainable buildings, cities and human settlements offer a representative overview of the urban and building-related challenges, international programmes and initiatives to tackle them, and the political agenda. These include the following:

Energy Sector Management Assistance Program (ESMAP)

The World Bank's Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program that provides advisory services to developing countries in order to increase their know-how and institutional capacity to realize sustainable energy solutions for economic growth and poverty reduction. ESMAP's work is divided into four main focus areas, namely clean energy, energy access, energy efficient cities, and energy assessments and strategies. ESMAP's Energy Efficient Cities program demonstrates, among other things, how cities can use a variety of technologies, policies and financing mechanisms to improve energy efficiency in buildings. Solutions are tailored to the cities' needs by identifying barriers as well as under-performing sectors and prioritizing areas for energy efficiency intervention. ESMAP also helps match barriers to energy efficiency improvements with appropriate policy tools. A database provides information on case studies in the lighting, heating and sectors: other http://www.esmap.org/node/231; https://www.esmap.org/

UN Habitat

UN-Habitat is the United Nations program that is working towards a better urban future by promoting sustainable human settlement development to achieve adequate shelter for all. UN-Habitat has numerous initiatives in place, including programs on smart cities, urban planning, safer cities and urban low emission development.

UN Habitat addresses the importance of using green building materials for the construction of new houses and public buildings. Through the program, companies can expand their businesses to new, emerging markets by lending their expertise and knowledge on building design and construction. Companies the World Urban join Campaign (http://www.worldurbancampaign.org/join), а partnership program designed to raise awareness about the importance of urban change to achieve sustainable urbanization and welldesigned cities, and showcase best practices.

The city of Vienna and UN Habitat have already cooperated to identify best practice examples that demonstrate solutions to urban challenges. The best practices are evaluated according to the following criteria: implementation through partnerships, innovation, social inclusion, impact and sustainability. Since 1996, 14 programmes of the city of Vienna have been recognised as best practice examples and were included in the UN Habitat database, which is the largest collection of city initiatives and programmes.

Learn more:

https://www.wien.gv.at/stadtentwicklung/projekte/international/bestpractices.html

http://unhabitat.org/

National initiatives offer support to Austrian companies with broadening their business abroad and entering new markets: WKO gointernational, ADA business partnerships, Austrian Green Building Star

Austrian national initiatives

WKO go-international

The go-international initiative, established by the Federal Ministry of Economy (BMWFW) and the Austrian Federal Economic Chamber (WKO), helps Austrian companies to broaden their business abroad or to enter new markets. The export promotion initiative comprises support measures from the motivation of SMEs to start exporting, to know-how export, foreign direct investment in growth markets and similar areas. Direct grants offer co-financing, and companies pay discounted participation fees for events (trade fairs, fact-finding missions, Austrian Showcases). WKO organises B2B and matchmaking events focusing on specific sectors, such as sustainable buildings, and economic missions to promising markets.

http://www.go-international.at/English_Version.html

The Austrian Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) works closely together with WKO and supports Austrian companies in the environmental technologies sector in their efforts on external markets. Thereby, export rates shall be raised from 60% to 80% by 2020.

https://www.bmlfuw.gv.at/en/fields/greentec/Exportinitiative0/Exportinitiative.html

Austrian Development Agency's Business Partnerships

Developing countries can significantly benefit from new inflows of investment or goods, as they create jobs, build supply chains and mobilise capital and know-how. In cooperation with Oesterreichische Entwicklungsbank (OeEB), the Austrian Development Agency's (ADA) Business Partnerships support entrepreneurs from countries within the European Economic Area or Switzerland with their engagement in developing and emerging countries, if they partner with local companies.

As part of a Business Partnership, ADA will provide the entrepreneur with a grant of max. 50% of direct project costs up to EUR 200.000, or of max. EUR 20.000 for a feasibility study. The Business Partnership office can help guide and assist you in all phases of the process from drafting the concept to project implementation.

One successful example is the Business Partnership of the Austrian Sto GmbH for energy efficient construction, innovative thermal insulation and passive house design in Macedonia.

http://www.entwicklung.at/en/funding/business-partnerships/

Austrian Green Building Star:

The Austrian Green Building Star, a new certification system initiated by the BMLFUW and BMVIT presents Austrian quality in sustainable buildings on an international scale. The certificate, which is marketed through the Board of Foreign Trade of the Austrian Federal Economic Chamber, is granted to energy efficient and sustainable buildings abroad, which are constructed with major contribution of Austrian expertise. Globally applicable quality criteria for energy efficient and sustainable buildings have been developed on the basis of the national klimaaktiv building standard. The certificate, which is awarded with four to six stars, focuses on energy efficiency, health and user comfort, avoidance of environmentally harmful construction materials and high construction quality overall.

The first Austrian Green Building Star was awarded to a passive house office and residential building in ZhuoZhuo, close to Peking. The Austrian planning office Schoeberl & Poell GmbH planned the building and managed construction supervision; construction was undertaken by Chinese companies.

Find more information at:

http://www.klimaaktiv.at/english/buildings/austriagreenbuilding.html

and http://austriangreenbuildingstar.com/

How to proceed

Cooperation within an international initiative can help mitigate some of the hurdles for private sector engagement in the green buildings sector in developing and emerging economies. To realise the full potential of private sector activities abroad and in the context of sustainable development endeavours, coordinated action by Austrian stakeholders increases the prospects of success. Support mechanisms play an important role for exporting Austrian expertise and products, and should be complemented with soft measures like regular exchanges between Austrian actors, raising awareness on the international level on the high-quality expertise, products and services of the Austrian building sector and on the national level on the opportunities for international activities.

The Global Forum on Sustainable Energy (GFSE) wants to build upon the momentum created by the Sustainable Development Goals and the COP 21 climate conference to bring national and international stakeholders together, to present opportunities for the Austrian private sector and to create win-win solutions. GFSE will act as a knowledge and information broker by organising networking events and informing various stakeholders on the latest developments and opportunities in cooperation with strong partners.







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