

SUSTAINABLE ENERGY BUSINESS DISTRICTS

Enabling Clean Energy Deployment for Cities in China

Clean Energy Deployment
Resource Guide Series

SOLUTION PROVIDERS

Clean energy solution providers are an essential component of any building energy retrofit or upgrade project. They provide the necessary technology solutions and technical expertise to help consumers achieve deep energy savings. As markets for clean energy products and services expand globally, it will be increasingly important to form strategic partnerships and leverage innovative deployment approaches to gain and retain market share as competition intensifies.

Clean energy solution providers working in the commercial building market are often in fierce competition with one another for the attention of prospective customers. However, many of them focus on complementary technologies, such as LED lighting, solar PV, and building energy management systems (BEMS), and are not direct competitors. As commercial building owners increasingly seek more comprehensive solutions for reducing energy use and operating costs, there is an opportunity for solution providers to better serve their customers by offering clean energy retrofit and upgrades packages with a portfolio of technology options.

This resource guide is intended to provide energy efficiency and renewable energy solution providers with a collaborative business model that leverages strategic partnerships to enter the Chinese clean energy market, gain market share, and accelerate local project activity for building efficiency and renewable energy.

STRATEGIC PARTNERSHIPS SUPPORT MARKET ENTRY & EXPANSION

Government mandates and corporate sustainability goals have driven much of the initial clean energy project development activity in the commercial building sector across the globe. Changing market dynamics are accelerating industry consolidation and intensifying competition, making it challenging for small- and medium-sized clean energy companies to enter new, rapidly expanding markets. Furthermore, many large multinational companies already have well established operations and distribution networks in these markets, as well as reputable financial partners.

The success of smaller energy efficiency and renewable energy companies entering new markets and expanding their customer base will largely depend on their ability to establish effective partnerships with local organizations as well as industry peers. Partnering with local organizations



**Strategic Partnerships & Comprehensive
Solutions Can Expand Market Share**

can facilitate the establishment of a local presence and credibility in new markets, while partnering with peer solution providers that offer complementary products and services can enable companies to improve their approach, reduce customer acquisition costs, and, ultimately, increase competitiveness and market share.

The Sustainable Energy Business Districts (SEBIZ) program successfully implemented a distributed clean energy project aggregation model that builds scale for smaller projects and simplifies the process of energy upgrades for commercial building owners. This model is described on the next page.

INSIGHTS INTO THE CHINESE MARKET FOR CLEAN ENERGY SOLUTIONS

Despite the seemingly limitless opportunities in the Chinese clean energy market, there are significant challenges that deserve careful consideration when developing a market entry strategy. Challenges and opportunities identified during the implementation of the SEBIZ program in China are described in the following section.

COMMON CHALLENGES

- Lack of awareness among building owners of their buildings' clean energy potential and the benefits that could be obtained through energy retrofits and upgrades.
- Standardized and transparent procurement processes, such as RFQs and RFPs, are not common in the industry.
- Very short payback periods or large financial savings are often the only motivator commercial building owners and businesses.



Wujin National Hi-Tech Industrial Zone, China

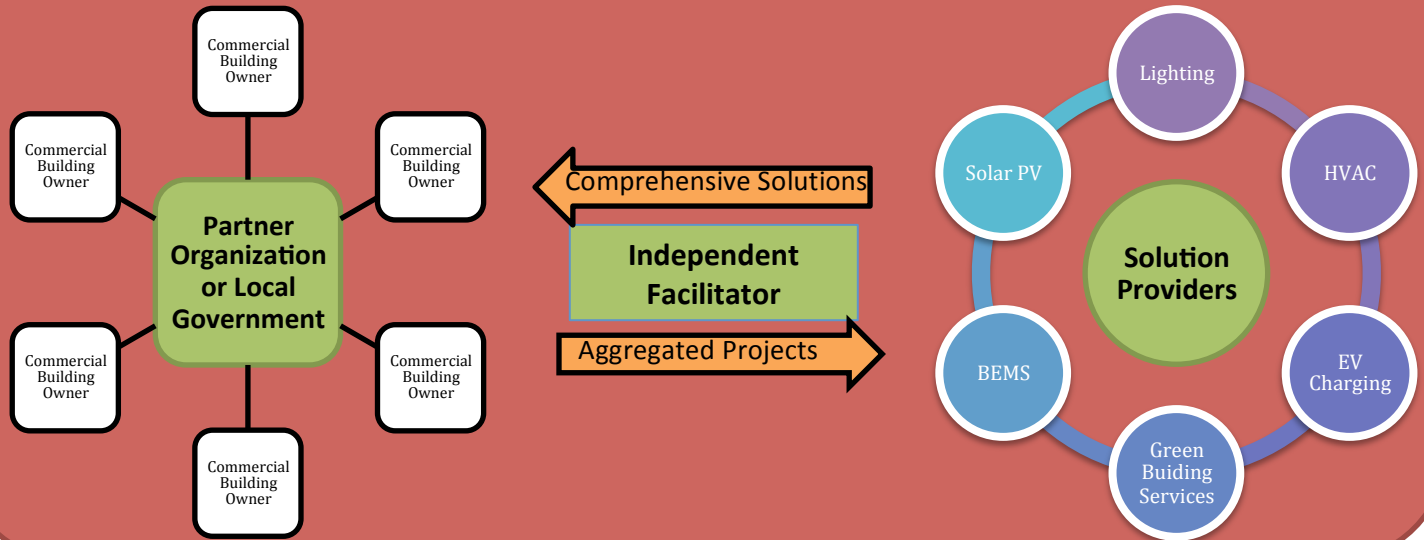
- Building owners and tenant businesses are unable to effectively position their companies to benefit from the sustainability aspects of clean energy upgrades, such as the greening of operations for marketing purposes.
- Usage of commercial buildings changes quickly due to tenant turnover from market forces.
- Employee comfort is not heavily considered when making decisions regarding energy usage. This includes thermal comfort, adequate lighting levels, proper ventilation, etc.
- In China, there is little interest in paying for services separate from products.

BENEFITS & OPPORTUNITIES

- Participants can achieve clean energy goals faster while stimulating economic activity and job creation for the local economy.
- Simplification of clean energy retrofit and upgrade process encourages commercial building owners to take action.
- Project aggregation leverages economies of scale and reduces transaction costs to improve project economics for buyers and sellers.
- Reduced time and costs for solution providers associated with customer acquisition.

The ultimate goal of the SEBIZ program is to help communities achieve environmental goals by reducing energy consumption and associated carbon emissions in the commercial building sector. The model accelerates the deployment of building retrofit projects, equipment upgrades, and on-site renewable energy generation, while expanding business opportunities in global clean energy markets. For more information, visit www.cleanenergyroadmap.com.

SEBIZ CLEAN ENERGY PROJECT AGGREGATION APPROACH



- Many buildings owners have never had an energy audit performed on their building.
- Opportunities for participant recognition and branding when multiple commercial building owners opt-in to an organized program.
- Partner organization and independent facilitator provide reassurance to all stakeholders that the process and transactions are fair and transparent.

BUILDING PORTFOLIO APPROACH TO ENERGY RETROFITS & UPGRADES

The approach taken by the SEBIZ project team to implement the aggregation model is outlined in the graphic above. Aggregating project opportunities across a portfolio of 46 facilities enabled the SEBIZ program to significantly reduce time spent and cost associated with project development for both buyers and vendors. Furthermore, SEBIZ helped introduce new market entrants to partners and customers the China market. The success of this model depends in large part on three main stakeholder groups, as described below.

PARTNER ORGANIZATION

The partner could be a district-level organization or a local government that can effectively support the recruitment of individual commercial building

owners to participate. Alternatively, this organization could be a corporate entity with a portfolio of buildings. In the case of SEBIZ, the Wujin National Hi-Tech Industrial Zone in Changzhou and China Development Orient in Beijing served as the partner organizations. As an industrial zone administrative committee and a real estate developer, respectively, they provided the stakeholder engagement necessary to recruit participants and encourage active involvement. Participation of commercial building owners is essential in order to aggregate potential clean energy upgrades and retrofit projects across the buying group's building portfolio.

INDEPENDENT FACILITATOR

The facilitator provides independent technical expertise and project management capacity to ensure successful implementation. The primary function of the facilitator is to establish and strengthen the stakeholder network throughout the project lifecycle. The work scope for this role can vary depending on available resources and the desired level of involvement from the stakeholder group. Energy audits and procurement management could be performed by the partner organization or these tasks could be the responsibility of the facilitator. In the case of SEBIZ, Optony Inc. served as the independent facilitator and provided project management capacity, led the

stakeholder engagement effort, performed energy audits, identified and pre-screened project opportunities, established group of qualified solution providers through an open RFQ process, and facilitated buyer-vendor matchmaking.

SOLUTION PROVIDERS

Qualified clean energy solution providers bring the actual technology solutions to the aggregated projects, including building envelope retrofit materials, efficient equipment upgrades, and on-site renewable energy generation systems. Through the issuance of a request for qualifications or proposals, pre-qualified solution providers can help simplify the process of energy retrofits and upgrades for commercial building owners. By leveraging the aggregated approach, building owners receive individual proposals with group pricing that reflect a bulk purchase discount. Ideally, the offers have integrated financing options or an established financing partner in order to overcome the upfront cost hurdle. In the case of SEBIZ, the solution providers were identified through the issuance of a RFQ by the independent facilitator on behalf of the commercial building owners.

CONSIDERATIONS FOR MARKET ENTRY OR EXPANSION STRATEGY

Successful entry into the rapidly expanding Chinese clean energy market offers abundant opportunities. Companies with an appropriate strategy, effective partnerships, and supportive network, can grow sales while helping achieve important energy and carbon reduction targets. Below is an overview of five key considerations to take into account when developing a market entry or expansion strategy in China.

1. ESTABLISH IN-COUNTRY PRESENCE THROUGH STRONG PARTNERSHIPS

- Having an in-country presence will support relationship building, which is a critical part of doing business in China.
- Local partners can provide instant credibility and unlock access to existing networks.

"First of all, I want to say thanks for the inviting us to attend the wonderful matchmaking event. We got a chance to meet directly with the end-customer and had an effective conversation in a productive meeting environment. Thanks again for your fruitful work, because without Optony having introduced us to the new buyers it would have been very difficult to set up similar business development meetings. By participating in the SEBIZ program, we saved time and costs, and expect that many business opportunities will develop as a result of this model. We wish this model could be expanded."

-Mr. Miao Zhisheng
Territory Manager, Osisoft

- Partnering with local organizations helps mitigate some of the common risks associated with entering a foreign market.
- Consider joining industry associations, participating in trade missions, and other related activities in order to gain a deeper understanding of market fundamentals and accelerate partnership formation.

2. DESIGN SOPHISTICATED APPROACH TO MARKET SEGMENTATION AND VALUE PROPOSITION

- Identifying potential customer groups early on will help to define value propositions and design tailored marketing strategies according to customer needs and priorities.
- Establish effective messaging and positioning for prospective customers, such as highlighting cost savings over carbon savings or a smart building upgrade rather than an efficiency retrofit.
- Customers must have clear understanding of proposed solution and benefits in order to consider implementation.
- Solution providers often need to fill the information gap for energy consumers.

3. DEDICATE SUFFICIENT RESOURCES TO AVOID CAPACITY CONSTRAINT ISSUES

- Ensure that adequate resources are dedicated to market entry or expansion to avoid capacity constraint issues that inhibit a company's ability to satisfy market demand.
- Energy companies need to scale their operations and processes to handle a higher volume of

smaller projects.

- Consider developing of a pilot project with a partner in a target market to leverage shared resources, demonstrate expertise, and establish a track record locally.

4. EXPLORE PROJECT AGGREGATION TO STREAMLINE CUSTOMER ACQUISITION

- Many solution providers in the Chinese market are interested primarily in utility-scale projects, as they are more profitable than distributed commercial-scale projects.
- Aggregation of distributed projects provides an opportunity for smaller companies to reduce transaction costs and build scale to improve returns.
- Models like SEBIZ that pre-screen and aggregate project opportunities have proven to be successful, but need proper positioning to ensure that all participants have a clear understanding of roles, responsibilities, and goals.

5. KNOW THE COMMERCIAL PROJECT FINANCE LANDSCAPE AND INCENTIVE STRUCTURE

- Energy Performance Contractors and Energy Service Companies can play an important role in project development by helping to overcome the upfront cost hurdle.
- The shared savings model in China, similar to an energy savings performance contract, is a popular financing model for retrofit projects. The Chinese government offers a multitude of incentives for energy efficiency, renewable energy, and green buildings, but access to current information can be difficult to find. A project facilitator can mitigate this obstacle.

GETTING STARTED

To begin developing a clean energy market entry or expansion strategy in China, consider starting with the following steps:

1. **Find a partner organization** with an established network in the desired target market.
2. **Conduct market research** and establish appropriate marketing strategy with targeted value propositions.
3. **Appoint a qualified project manager** that will be responsible for program implementation and accountable for goal achievement.
4. **Create financing partnerships** with Energy Performance Contractors or Energy Service Companies to provide financial solutions for identified projects.

For other resource guides in this series about the SEBIZ model and approach to project aggregation, visit www.cleanenergyroadmap.com/about/sebiz.



Optony is a global research and consulting firm focused on enabling government and commercial organizations to bridge the gap between clean energy goals and real-world results. Leveraging our independence, domain expertise and unique market position, our clients are empowered to make informed decisions that reduce risk, optimize operations, and deliver the greatest long-term return on their investments. www.cleanenergyroadmap.com



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