

## **Case Study of Clean Stoves Production, Promotion and Marketing**

**—Xunda Science and Technology Group Co., Ltd**

### **1. Company profile**

Established in 1984, Xunda Science and Technology Group Co., Ltd has grown into a creative high-tech private enterprise integrating scientific research, production, and sales after 30 years of business operation. Our company prides itself with developing superior quality products marked with perfection with the professional standard, ranging from kitchen appliances and biomass new energy products. . The products have achieved “Hunan Province International Well-known Brand”, “China Famous Brand”, “China Top Brand”, etc successively. The company becomes “technological innovation”, “ecology and environment protection” and “social responsibility” excellent organization by implementation of the Excellent Performance Mode, catch up and surpass the benchmarking.

We are proud to have a state-accredited Enterprise Technical Center. The development of new technologies has always been a quintessential part of our company’s tradition.

Sincerity and faith in unity, honesty, and trust in management is our operation philosophy. We commit this business philosophy to establish collaborative partnerships by delivering all of our customers technologically advanced products each and every time. In doing so, we implement every possible way to protect the environment and use techniques that have proven to yield top quality products.

### **2. Technological characteristics and innovation of biomass cookstoves**

Xunda biomass clean cookstoves introduce the theory of a gas whirlwind concentration burner to the biomass burning field. This makes the pre-mixed gas burning come to life resulting in a more complete and efficient burn. A more complete and lengthy burn allows more time for high temperature gases to stay in the combustion chamber producing a highly efficient burn. The result of a prolonged burn is that heat efficiency is improved and harmful emissions are reduced.

New technological improvements are as follows:

- a. Presence of a funnel-shaped furnace core support plate at the bottom of the hearth of the clean stove to prevent precipitates sinking, tempering, and narrow the channel area of the precipitates. After the primary air flows into the hearth by the funnel mouth and grate, the air takes away the downwardly deposited precipitates, overall preventing tempering;
- b. Set plane sealed stepless adjustable dampers on the basis of clean cookstoves to achieve stepless adjustment of firepower. Requiring no precise mechanical assembly, the component has a simple structure, high reliability and strong feasibility.
- c. The air flap is equipped with a balance hole to prevent tar blocking the damper. Balance holes are designed for the air damper to prevent tar and dust entering the air passage.
- d. With swirl combustion efficient gas furnace patented technology, the company is about to set a louvered air distributor based on the original settings of the clean stove. The goal of this improvement is to achieve swirl-style supply of primary air conducive to the fuel combustion and thus achieve the goal of efficient combustion and emission reduction.
- e. Improve product package and design, increase quantity, and reduce logistics costs.

### **3. Production and quality control**

Our company has passed ISO9001 international quality system approval and ISO14001 international environment system approval in 1998. We are proud to organize the production and control the quality in strict accordance with the above requirements.

In order to simplify the biomass clean cookstoves' production process, our R&D staff develops robotic equipment to independently complete the working procedures of feeding, tailoring, and stamping, which is now done by three to five people. Through

mechanized manufacturing to simplify the production process, we aim to increase the productivity and reduce human cost.

The concept that quality is the life of an enterprise is at the forefront of our company's ideology. With a perfect management system created and quality control as a best quality guarantee, we are strict in ensuring high standards in the production process, such as purchasing raw materials, workshop procedures, analyzing all collected data according to quality and quantity with statistic techniques, and researching and improving production methods to constantly improve quality. All these steps culminate to a manufactured product that is recognized and revered for its quality. This is what truly sets us apart from our competitors and reinforces Xunda product competitiveness.

#### **4. Market distribution and sales model**

Our products are popular nationally and internationally, with sales to more than 80 countries and regions in Europe, America, Southeast Asia, Middle East, and Africa.

In domestic market, our products are sold to more than 1,000 project counties of 28 provinces. The sales mode is mainly through bidding and agents.

In foreign market, our company has successfully developed essential lifestyle products, and has created multi-style, multi-material, and multi-functional products which are popular among local people. At present our main sales regions are USA, Germany, Holland, UAE, Guatemala, India, Fiji, Yemen, Bangladesh, etc. The sales mode is mainly trade agency.

#### **5. Construction of after-service system**

The after-sales service is the basic demand of sales for customers.

In domestic market, our company's service standards and content can be summarized as "One subordinate, three services, one collaboration". "One subordinate" is performing the obligation of the company in the service field. "Three services" encompass pre-service, sales, and after-sales service. "One collaboration" is the active cooperation within the provinces, cities, counties and rural energy services

departments with the product's after-sales service, technical training, and service network construction work.

In the foreign market, we provide spare parts and professional knowledge training for the customer through a overseas marketing network.

## **6. Major achievements and experience**

In the domestic market, we try our best to provide customers with quality products by making use of advanced technology and strictly quality control in accordance with the government's request. In recent years, our company as positively implemented the sustainable development strategy and has made a great contribution to the new rural construction in China. Our new energy products are sold to more than 1,000 project counties of 28 provinces and municipalities with a market share up to 40 % and total sales volume topping 2 million, ranking first in China. Our company has been listed among the “Top 100 Influential Enterprises of World Environmental Protection and New Energy Industry in China” and has annual sales of 78,800 biomass clean cookstoves now, resulting in number one sales in China.

In the foreign market, our products and company already are well-known in many countries. We insist on making locally appropriate products, using the international marketing knowledge and experience to actively participate in the international competition and sales. Now our products are popular internationally, with sales to more than 80 countries and regions in Europe, America, Southeast Asia, Middle East, and Africa.

## **7. Obstacles and problems**

For the sales and promotion of biomass clean cookstoves, our company encountered a few obstacles and problems:

### In the domestic market:

- a. The promotion of new energy products still mainly relies on government purchases. Products are not fully market-oriented.
- b. At the present stage, there are many kinds of technical standards. The

standards need for further unity to improve technology.

- c. Competing products, coal stove, gas stove, and electric stove have the influence to hinder the promotion of biomass clean cookstoves.

In the foreign market:

- a. The technology of Chinese biomass clean cookstoves is mature and improved, however how to strengthen the international market influence and market penetration relies on government appeals, support, and promotion of the related policy.
- b. Foreign technical barriers and tariff barriers still exist which weakens the international competitiveness of domestic products.
- c. The using significance and independent awareness of biomass clean cookstoves are low.
- c. Unavoidable product availability and affordability are limited during promotion.
- d. The lack of international talents which are needed for product promotion experience in the international market.

**8. Development direction and objectives**

Our mission is to “create products that reduce pollution and energy dependence while yielding health, environmental, and economic improvements.”

Our company’s developing direction and target are:

8.1 Strive to improve the local market share based on product update

As a populous country, China has 1/5 of the world's population and rural residents account for about half of the Chinese people, hence the rural market has huge potential. China is also a major agricultural country with a large land area in rural areas and a large number of biomass fuels produced annually, including straw and corn cobs - therefore China is a large biomass clean stove market. Secondly, China is a complex and diversified market. Due to the different environment and situations of

various regions, we'll launch the relevant products based on the market situation.

## 8.2 Promote the development of the international market of clean cookstoves through developing international trade and conducting international strategic cooperation

Based on market research, we'll use the existing international sales channels of our kitchen appliances to launch our products to allocated target markets.

Three steps are crucial in successful product launch. The first is developing more products which are suit for the local market, reducing costs to increase the purchasing power of the local market. Next, having strategic cooperation with foreign customers through technology transfer and export is crucial. Finally, South-South cooperation must be at the forefront in promoting biomass clean cookstoves. Making the biomass clean cookstoves included in the foreign aid program through South-South cooperation is essential, as well as promoting clean government sales in the third world countries through government, improving people's livelihoods, and promoting the economic development and social progress.