Solar cookout aims to woo traditional chefs, cut carbon

Continued from page one

Smaller-scale vendors used three-footlong solar cookers designed to fold up for picnics.

Temperatures can top 400° Celsius (750° Fahrenheit) inside the black "BBQ tubes" of metal and glass with turnip-tipped bottoms and sealable tops. On a bright day, they can boil water within 30 minutes and roast a fish in half that time, according to Himin.

"It is clean and smoke-free. better than cooking with pots and other things," said Yu Liqiu, 22, a chef, who just began cooking with solar two days earlier.

Dezhou, a sprawling city of 5 million in eastern China, has spent millions since 2005 on transforming itself into an aspiring renewable energy hub called the "Solar Valley."

Public art displays at town bus stops and murals use solar panels. Stone statues of sun-related Chinese legends squat in parks.

China is the world's biggest consumer and producer of solar technologies. Many homes outside the largest cities are equipped with solar water heaters.

But roughly 600 million of China's 1.4 billion people still cook with coal, wood, or other biomass despite decades of government-led initiatives to curtail soot from such burning, according to a 2016 report by the Global Alliance for Clean Cookstoves.

Affordable yet durable solar cookers have long intrigued those seeking to cut emissions, said Frank Haugwitz, director of Asia Europe Clean Energy Solar Advisory Company.

"There's certainly a need for a cleaner option," he said.

Eastern China is a "global hotspot" for black carbon emissions — sooty particulates more damaging to health and the environment than typical greenhouses gasses — according to a 2007 report in the academic journal *Nature*. Half of China's black carbon comes from residential kitchens and heaters.

Sun Penglong, 27, worked in gas kitchens in Dezhou for years before





switching to solar. He says new recipes must be invented and tested for solar cooking, but there is one unexpected perk: His wife doesn't complain about the smell he used to bring home in his work-clothes.

"The first thing my wife used to ask me to do after returning home was to shower,"

Sun said after roasting some beef skewers in a BBQ tube.

"When I started as a solar chef, my wife asked me, "Where is your smell?"

But getting solar cookers to the masses has proven daunting.

Solar cooker technology has not yet matured. While cheap types are available,

SOLAR BUNS. Chefs (top photo) prepare to cook buns in a solar cooker using a metal and glass vacuum tube heated by mirrors curved to capture the sun's heat (bottom photo), in Dezhou in eastern Shandong province, China. A sprawling city of 5 million in eastern China, Dezhou has spent millions since 2005 on transforming itself into an aspiring renewable energy hub called the "Solar Valley." (AP Photo/Fu Ting)

more reliable ones are still too expensive for rural communities. "It's kind of a chicken and egg thing," Haugwitz said.

Some experts fear solar is too big a break from traditional Chinese cooking.

"It is good to have some innovation, but it's impossible to change people's dietary habits," said Xu Qinhua, deputy director of the National Academy of Development and Strategy under Renmin University of China.

"People used to say China's fire-fried dish culture would be replaced by induction cookers, but no, it was not."

Himin has yet to produce a retail version of the cooker or sell it outside of Dezhou, but the company claims chefs in the city are already adapting cookers gifted to them to a variety of regional Chinese cuisines in new solar restaurants opening up across the city.

In the solar-panel festooned Micro-E Hotel, next to the field where the festival was staged and down an air-conditioned hall past portraits of Al Gore and other climate advocates, Huang and other festival goers toasted the vacuum-tube solar cookers with glasses of fiery baiju, red wine, and beer.

Next came a marathon banquet of courses, including turtle soup and pancakes served on platters with foot-tall figurines of Chinese legends like the mythical archer Houyi. According to legend, he shot dead nine suns before harnessing fire for humanity's benefit.

Ren Yanbo, vice secretary general of the Efficient Stove Division of the China Association of Rural Energy Industry, appeared to be won over.

"I was impressed by the taste of pig feet cooked by solar, it was soft and yummy, I could not believe it was cooked by solar," she said.



SWEDISH STORE. Indian customers stand outside IKEA's first store in India, in Hyderabad, India. Swedish home furnishings giant IKEA opened its first store in India five years after it received approval to invest in the country's single-brand retail sector. (AP Photo/Mahesh Kumar A.)

Swedish IKEA opens first single-brand retail store in India

HYDERABAD, India (AP) — Band music and loud cheers greeted hundreds of customers as Swedish home furnishings giant IKEA opened its first store in India, five years after it received approval to invest in the country's single-brand retail sector.

The store in the southern Indian city of Hyderabad, India's information technology hub, is spread over a sprawling five hectares.

IKEA Group CEO Jesper Brodin said the company's involvement with India began over three decades ago with the sourcing of products.

"We have a long-term commitment to India, which is an important market for us," the Press Trust of India news agency quoted Brodin as saying.

The company's vast array of goods available at one place gives it an advantage in India. The Indian furniture market is mostly unorganized and composed of small- and medium-sized businesses.

IKEA plans to open 25 stores in India by 2025. It says it currently employs 950 people and plans to hire another 15,000 as it expands operations.

India's economy is growing by about seven percent a year. Its retail sector provides the second highest amount of employment after agriculture.

But small traders fear that large retail stores operated by multinational companies will lead to the closure of tens of thousands of mom-and-pop shops across the country.

