## **Huang Ming**

Himin Solar

Alternative Energy



Born in Jiangsu in 1958, Huang Ming is one of the many examples in this book of a business leader who was lucky enough to be of university age just as the Cultural Revolution ended.

#### **Getting started**

He studied at the China University of Petroleum. At 19, Huang was told by his professor that oil would run out in 50 years. This thought stayed with him and he started to worry about China's excessive reliance on fossil fuel.

In 1982 be became an oil equipment engineer at the Ministry of Geology and Resources. During his spare time he designed his first solar-powered water heaters. He gave some as gifts to family and friends.

## **Big Break**

A factory owner liked the design and that made Huang realise his hobby could be commercialised. In 1995 he quit his government job to set up Himin Solar.

As one of the early movers Huang's start-up

grow quickly. Himin is now China's biggest maker of solar water heaters, producing one million per year. His hometown, Dezhou, which was previously known mainly for its braised chicken, has become an important hub for the country's solar industry – three-quarters of its homes use Huang's product. The company's eye-catching headquarters, the Sun-Moon Mansion, is also said to be the largest building in the world to use solar power as its main energy source. You can even get round the HQ on solar-powered golf carts.

Himin has received attention from serious investors. In late 2008, Goldman Sachs and private equity firm CDH Investment together invested \$100 million in the company to feed growth and finance research and development. Huang said at the time that Himin was looking to go public. However, according to Chinese media, the company has since cancelled at least three listing plans, as Huang doesn't want to float his company while the valuation of the solar sector remains lacklustre.

Himin has also expanded to provide green power solutions for hotels, schools, factories and airports. It has built a low-emission holiday resort in Dezhou known as Solar Valley.

### Need to know

As a deputy of the 10th National People's Congress, Huang moves in powerful political circles. He proposed the Law on Renewable Energy, which came into effect at the beginning of 2006. Using solar power to solve social problems is second nature to Huang. During one plenary session, he proposed a motion to introduce solar-powered bathing facilities in the countryside since there are as many as 100 million farmers that do not have access to bathing facilities.

#### And to relax

Like the country's leader Xi Jinping he is an avid football fan.

"We want to be like what Henry Ford was to the automobile industry"

## **Key info**

Huang is worth Rmb2 billion according to the 2015 Hurun Rich List.

## **Zhang Yue**

## **Broad Group**

Alternative Energy



Zhang Yue was born in Changsha in 1960. He studied art at college and spent a few years teaching, before trying his hand at a variety of different businesses – such as painting, advertising, interior design, as well as selling motorcycles and air conditioners.

#### **Getting started**

Zhang founded Broad (the company's Chinese name means 'expansive and large') in 1988 after his brother patented a new technology that allowed them to sell pressure-free boilers to factories.

#### Growth

In 1992, Broad started to concentrate on producing large scale non-electric air conditioning chillers, which were popular due to the shortages of electricity in China. Broad's units differed from conventional air conditioners because they used natural gas or other sources of heat to boil up a more environmentally friendly liquid: lithium bromide solution. When the vapours condense, the surrounding area becomes cool. This is supposed to be twice as efficient as electric models.

According to 21CN Business Herald, Zhang has kept his company largely debt free since 1995, a remarkable feat amongst expansionist Chinese entrepreneurs. Zhang also refuses to bring in any new shareholders or take the company public.

Meanwhile, he's also branched out into construction. In 2012, Broad grabbed headlines when it announced a spectacular plan to erect an 838-metre tower in Changsha. Known as the Sky City, Broad claimed it needed just seven months to construct the building using a revolutionary new technique.

However, no sooner had it broken ground in 2013 than work was halted. Domestic media outlets report that the company had not obtained the necessary permits for the ambitious project. When journalists revisited the site in July 2016, they could only find the shallow foundation pit of Sky City, filled with water and noted that locals had begun to farm fish in it instead.

### Need to know

Zhang became interested in the environment between 1999 and 2001, when he started reading up on environmental issues. Zhang started to practise what he preached. In the mid-nineties for example, he became famous for being the first man in China to own a private jet. But when he converted to the environmental cause, he sold three of them and started taking commercial flights instead.

His company headquarters is known as Broad Town and is located in Changsha. It embodies his ideals. Home to more than a thousand workers, the compound features what is billed by Broad as the world's first "sustainable building", with a focus on earthquake resistance and energy efficiency. Zhang believes that inspirational buildings make his employees happier. Broad Town features buildings bearing resemblance to the Pyramids, Versailles and Buckingham Palace.

Zhang was the first man in China to own a private jet

## **Key info**

The Broad Group planned to build a 838-metre skyscraper – the world's tallest – in Changsha. The project was never completed.

# **Zhu Gongshan**

GCL-Poly

Alternative Energy



#### **Getting started**

Zhu Gongshan was born in rural Jiangsu in 1958. He majored in electrical studies before becoming an electrical salesman in his hometown of Funing in 1978. He eventually set up his own firm, and as his ambitions increased he registered the GCL Group overseas, with the aim of investing in China's power sector. His first deal: to build a thermal power plant in Taicang.

#### Big break

The year was 1996 and significantly Zhu's coinvestor was controlled by the Poly Group, a firm that historically had close ties to China's army. So when Zhu's company became GCL-Poly it was evident to all that it had connections in the corridors of power.

Over the next decade he would build 20 plants – without ever incurring the wrath of China's five large state-owned power producers. In 2007 he listed GCL- Poly in Hong Kong and became known in China as 'the King of Private-run Power'.

He'd built coal-powered and biomass generators for the most part, but in 2006 he had a business epiphany: the future was in solar energy. He invested Rmb7 billion in a new unit to produce polysilicon, the raw material of the photovoltaic industry. His strategy – unlike Suntech and Yingli which made solar panels – was to start at the upstream end of the business and attain dominance there first.

#### **Smart move**

Almost immediately he made a far-sighted decision. At that time the world was facing a ramp-up in demand for solar panels and a shortage of polysilicon to make them. On the spot markets, prices of \$500 per kilogram were on offer, but Zhu elected instead to sign eight year supply contracts with grateful customers at prices of up to half the then spot. It proved a smart move. During the financial crisis in 2008, other producers got hammered when polysilicon prices plummeted to below \$100 per kg. His contracts helped Zhu profitably weather the storm and weed out weaker competitors. By 2008 he accounted for half of all China's shipments of polysilicon, remarkable for a new entrant.

In 2009 he decided GCL-Poly would diversify: building solar power plants and also by making silicon wafers (these are used in solar cells and are the building blocks of a solar panel). Once again a big state partner would enter the fray to help Zhu achieve his vision. Sovereign wealth fund CIC pumped \$710 million into his firm for a 20% stake. By the end of 2011, GCL-Poly's silicon wafer production capacity reached 3.5GW, accounting for almost 30% of global supply.

#### Need to know

In 2014, Golden Concord, the parent of GCL-Poly, and eight investors bought a combined 66 percent stake in financially-troubled rival Chaori Solar for \$240 million under a restructuring proposal.

"Of course,
[Western
companies] are
envious. I have
done in a few
years what took
them [much
longer]"

## **Key info**

He ranked 120th in the Hurun Rich List in 2015, with a net worth of Rmb18 billion.

# Li Hejun

## Hanergy Group

Alternative Energy



According to 'The Price of Being a Billionaire', a Chinese academic paper published in 2012, tycoons who've found their names appearing on the Hurun Rich List may see the market values of their firms dip significantly within three years of being mentioned. That seems spot on for Li Hejun, the major shareholder of Hanergy.

### **Getting started**

Born in 1967 in Guangdong, Li graduated from Beijing Jiaotong University with a degree in mechanical engineering in 1988. He borrowed Rmb50,000 from a professor and started a variety of businesses. According to Li's own account, he tried everything from trading electronic parts and bottled water to ventures in mining and real estate. By 1994, he saved Rmb80 million and then began investing in clean energy projects. The first was a Rmb2 million hydroelectric dam on a river in Guangdong where he swam in his youth. Similar projects soon followed.

## Big break

In 2002, Li signed an agreement to build six of Yunnan province's eight hydropower projects. At that time, no private firm had invested in a hydroelectric dam that exceeded 1 million kilowatts of capacity and the National Development and Reform Commission vetoed the deal. Li responded by suing and ended up getting just one of the projects approved.

Li then expanded into wind farms and solar power. According to Forbes, he now controls 10 dams, 18 solar power plants and 2 windpower sites. Most of these are unlisted assets controlled by Li's holding entity, Hanergy Holding Group.

Li has taken advantage of the downturn in the solar market to make a series of purchases of foreign assets. A key acquisition last year was Germany's Solibro, which gave him access to its technology. Unlike more conventionally rigid solar panels (made by the likes of Suntech) Solibro's thinner panels can be pasted onto buildings, in wallpaper style.

"Rather than investing in large power plants that sell to a big-utility-owned grid, as it has in the past, Hanergy is targeting individual buildings and rooftops with thinfilm that connects to building materials to create mini-power stations that don't draw down power from a grid," Forbes reports. "China's new policies to boost solar are encouraging development of just that kind of 'distributed' power generation."

### Big fall

The share price of Hanergy Thin Film (HTF), the Hong Kong-listed unit of Hanergy Holding, nearly tripled in 2014 despite concerns that most of its breakneck revenue growth was driven by connected transactions within the group. In early 2015, Li was named by Hurun as China's richest person with an estimated net worth of \$26 billion. Then came drama. On May 20, 2015: only 24 minutes into the day's trading session, HTF's share plunged a staggering 47%, wiping out nearly \$20 billion in market value. The stock was suspended for more than a year, but has resumed trading. His ranking on 2016 rich lists is set to plummet as a result of HTF's stock price fall.

He was named China's richest man in February 2015. The title would only last three months...

## **Key info**

Li still ranked 12th on the Hurun List in 2015 with Rmb63 billion in net worth.