

# The Weird and the Wonderful

## Worldwide Demand for Ecotech Inspires Inventors

The latest global vogue for environmentally friendly products and services has created an entirely new market. European giants like Germany have abandoned nuclear energy sources and begun aggressively pursuing solar, wind and biomass options; Asian tigers Korea and Japan responded to the financial crisis of 2008 by going green; and earlier this month, the world's largest and fastest-growing economy officially announced its plan to commit to climate change targets.



Self-proclaimed ecopreneur, Sigvald Harryson, is one of the many creative minds to have benefited from the world's latest trend. Harryson's environmental brainchild is the Giraffe, aptly named in terms of aesthetics, this strange-looking contraption is technically the world's most sustainable carport providing renewable energy to electric vehicles (EV). Composed almost entirely of biodegradable materials, the Giraffe is not only CO<sup>2</sup> neutral, it is CO<sup>2</sup> negative. The contraption has a higher energy density than any other EV recharging point of its kind, providing more than 13,000 kWh per year in less than twenty-five square metres. Harryson's invention is not only a remarkable feat of imagination, it represents an entire generation of weird and wonderful inventions taking local and global markets by storm. From

solar-powered phone chargers to pedal-powered electric bikes, the world seems ripe and ready for such innovations, wherever they may come from.

Having travelled between the extremes of the class spectrum, from a diminutive agricultural community off the coast of Sweden, to the highly-strung highly-paid lifestyle of a corporate consultant, Harryson found both peace and prosperity in the pursuit of his renewable energy dream.



I sold the villa and moved my Family to Malmö in Sweden. My collection cars were sold off and my savings went instead into a new company born on May 5th, 2010: InnoVentum - with the mission to give green Power to the People.

Sigvald Harryson, (Hong Kong, 2014)

Using his previous corporate success story as a platform, Harryson and his team set out to create breakthrough innovations aiming to be more environmental friendly and resource-efficient than any other competing product.

The Giraffe featured at the APAC Innovation Summit earlier this month in Hong Kong, aiming to penetrate the parallel markets of the Special Administrative Region and the vast Mainland. With a professional history punctuated by regular academic investigations into the development of Asian markets, it would seem that Harryson is perfectly poised to take the region by the horns.



**The interest to invest in renewable energy is quite limited in Europe and the ability to think big is growing small. Therefore, I turn to Hong Kong and China as a major growth opportunity for InnoVentum.**

Sigvald Harryson, (Hong Kong, 2014)

Though his zeal and charisma are boundless, how realistic is the outlook for the Giraffe in Mainland China? How dependent is this success upon appropriate marketing, and localised research and development?



Over the last five years, China's thirst for foreign technology has inspired a series of preferential policies targeting key strategic industries. Though large, patent-dependent technology firms may be discouraged by the country's notoriety for intellectual property rights (IPR) infringements, this investment climate creates unique opportunities for tech-intensive start-ups.

The peculiarities of the Chinese market make it a vibrant playground for technology start-ups and innovative entrepreneurs. The make-or-break environment of more mature markets like in Europe or the United States are less relevant in the Chinese case. There is more of a make-break-make-again approach taken by small and medium-sized enterprises (SMEs), with less capital-intensive investments necessary to make a modest breakthrough in a local market.[2]

**If you're an engineer with an idea and you're waiting five days or two weeks to test it, that's no way of being creative. When you're creative you want to try an idea and move on to the next idea and then the next idea. That's the kind of dynamic flow that's possible in Shenzhen that's not possible in the United States.**

Will Canine, Co-founder of OpenTrons (Shenzhen, 2014)

However, localisation is key.

In many cases, SMEs and start-up endeavours fall flat after the first few months because they failed to localise their mindset. One economic trend that could counteract this initial lack of local market knowledge is the ready availability of highly-qualified, low-cost researchers. Though prices on the factory floor are rising dramatically, as demand for vocational skills soars in the wake of a changing demographic situation, the country has a serious surplus of university-educated jobseekers.[3] In this way, start-ups and technology companies can invest in highly-skilled researchers before committing to production in China, at a relatively low cost. Understanding the immediate local market, rather than the vast and variable national Chinese market, is vital to survival.

A further perk of the localised approach is taking advantage of regional preferential policies. In the southern city of Shenzhen, Guangdong Province, the local government has established an entrepreneur hub for start-ups in strategic industries seeking subsidies and support. The Qianhai Shenzhen-Hong Kong Youth Innovation and Entrepreneur Hub targets young entrepreneurs aged between 18-45 with rent waivers and tax exemptions. The Hub also benefits from liberalised internet access, making it an attractive option for Hong Kong and foreign enterprises.[4] Aiming to incubate potential technology successes, the Shenzhen Hub

offers interesting incentives to innovators in software, hardware and environmental technology sectors.

So what about the Giraffe?

China's overall investment climate for environmental technology start-ups and innovations is ideal, but how will the Giraffe appeal to the Chinese consumer market? The Chinese consumer market for automobiles is still developing, making consumer acceptance of new products relatively high compared to more mature markets, like the United States. [5] Therefore, as a consumer base for EVs emerges in China, as will a market for related innovations and products. The novelty appeal of the Giraffe could make it stand out from competitors. However, the lack of connection with an established, foreign auto-brand may prove detrimental. Brand-awareness in China is rising rapidly. Growing consumer loyalty in the auto-industry is pushing automakers to abandon concerns over joint-venture technology share in favour of promoting brand loyalty. How would the Giraffe stand against the branding power of an established multinational automaker like BMW?



When adequately localised, the unique brand appeal of the Giraffe may gain momentum over established auto-brands. Chinese consumers often respond to the biggest, the best and the most brazen; particularly in densely populated urban regions, the Giraffe would certainly be a statement. Considering the investment that an electric vehicle represents, the targeted consumers would likely be among the wealthy elite of China's environmentally-conscious consumers. In this case, the Giraffe would have to adapt to its consumer base, and become sleeker, sexier and generally more marketable in a high-cost, fast-fashion environment.

## References:

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