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Green China

Capitalising on failures of US leadership, China is emerging as a potential 'great green power' of the 21st century.

Julian Cribb

With an estimated 4000 people choking to death daily in the pall of fossil fuels that overhangs China's industrial cities, the demand for clean-up action is imperative. ⁱ

It isn't just the air. Nearly two thirds of the country's groundwater and a third of its surface water are rated by China's Environment Ministry as too polluted for human contact ⁱⁱ – and water scarcity menaces many of China's largest cities, as well as the food supply. ⁱⁱⁱ

Then there's climate change, imperilling the giant nation's food systems and flood-prone regions. There's the still-booming trade in endangered animals and plants for Chinese medicine ^{iv}, the relentless creep of the deserts in the north and west ^v, the notorious 'cancer villages' ^{vi} coupled with soaring rates of 'lifestyle' diseases – stroke, cancer, diabetes, heart disease – stemming from an increasingly industrial diet and unhealthy cities. And those recurrent food poisoning scandals.

However, there is also growing evidence that the PRC Government is meeting the challenge of too-rapid development head-on. This began with the re-ignition by Premier Xi Jinping in 2013 of a 2007 plan to rebuild China as 'an ecological civilization'. ^{vii} Dismissed at the time by some observers as sloganeering, the idea of a Green China has been steadily gathering force, propelled by mounting

concern among its newly-affluent citizens who don't want a prosperity that is going to cost them their lives – and also by the huge economic returns to be reaped.

Like most industrial giants before it, China is attempting massive clean-up and reform of the dirty industrial systems that built its present economic success. In so doing it is simultaneously erecting the launch pad for its next phase of economic expansion, restoring its cultural pride and seeking to relieve the anxiety of its rising middle classes over their health and wellbeing. It's a work in progress, but progress is the operative word.

On the opposite side of the Pacific, by shocking contrast, an American President is throwing open his country's revered National Parks to oil drillers, shredding the environmental laws that shield Americans' health and safety, giving industry unbridled licence to pollute and defile, sabotaging world and national climate progress, creating unhealthier school lunches for America's children, making abysmal national healthcare worse and gagging government websites that warn citizens about these things.

While China suffers the pangs of over-development, grapples with endemic corruption and attempts to rein in the buccaneer industrialists who poison and pollute in the name of profit, the dream of a Green China is very much alive. Consider the following:

In the tussle for pole position in the booming market for electric cars China has already elbowed America into second place. In 2016 it reported putting 352,000 new electric vehicles on the roads, compared with 159,000 in the US, with plans for 3 million units a year by 2020.^{viii} It is planning to flood the market with tiny, \$5000, low-speed electric vehicles (LSEVs) and is the world leader in electric buses. For the rev-heads, China recently unveiled the world's fastest electric car, the NIO EP9, capable of speeds up to 312km/h.

In renewable energy China occupies a comfortable position as world market leader. At home, its 400 manufacturers have turned out 77 gigawatts of photovoltaic capacity, with plans for a further 100 GW in the coming three years. By 2030 the sun may provide 20% of its energy needs.^{ix} But China isn't just cleaning up its own power sector: through soaring exports it has driven world solar prices down by 80 per cent, thrusting American exporters into second place and materially helping the planet to clean up its act and combat climate change.^x

Last year China added 23 GW of the total of 55 GW of windpower installed worldwide.^{xi} Its target is for 26% of its national energy needs to come from the wind by 2030. At the same time, it has cancelled more than 100 coal-fired power plants that were planned or under construction, and announced plans to close over 1000 coal mines.

By such measures China has claimed leadership in the tussle for a share of what the *New York Times* estimates will be a \$6 trillion global market for clean technologies by 2030.^{xii}

With the Trump Administration's decision to abdicate its climate responsibilities, China has scented a once-in-a-generation opportunity to assert world policy leadership also, as *National Geographic* recently noted.^{xiii} "The Paris Agreement is a hard-won achievement," President Xi Jinping told the World Economic Forum in Davos, Switzerland, in January. "All signatories should stick to it instead of walking away from it, as this is a responsibility we must assume for future generations." Following Trump's exit notice, China has reaffirmed its intention of being a committed climate actor and its willingness to forge agreements with individual U.S. states.^{xiv}

At the consumer health end of the spectrum China is responding to a global cancer pandemic which is being exacerbated by pollution and industrial toxins in food. *New Scientist* reports the PRC has

taken a world lead in gene therapy using the new CRISPR technology to treat lung, cervical, breast, prostate, colon, kidney and throat cancers.^{xv}

The smoggy concrete vista of the modern Chinese city may soon be shrouded in green, as cities like Nanjing adopt the Italian-inspired ‘vertical forest’, tree-clad skyscrapers which suck pollution out of the air and replace it with oxygen.^{xvi} In Shanghai a 100-hectare urban farming development seeks to solve the compound challenges of food insecurity, employment and a fresh, healthier diet for urban Chinese.^{xvii}

And in a bid to overcome the disastrous state of its fresh water, the PRC is halfway through an \$11 billion plan to ‘massively reduce’ pollution, restore water quality and aquatic life and, hopefully, make its seven great river systems run clear again.^{xviii}

China still has a long way to travel before it becomes the ecological civilization of Xi Jinping’s vision – but all the indicators are there of serious intent. Driving it forward, says British scholar David Tyfield, is a deep-seated yearning to restore Chinese eminence among human civilizations, lost to the West more than two centuries ago. “China’s grand project of ‘ecological civilization’ is so important in contemporary domestic politics that the environment will likely be seen as (its) trump card for some time yet,” he says.^{xix}

Holding it back is the fragility of central control expressed in the ‘fragmented authoritarianism’ of Chinese political structures, and the PRC’s own evident internal vacillation over which path to take: conventional military gorilla - or a green economic ‘soft power’.

Either way, the fate of China will influence the fate of humanity at large in the 21st Century. And that fate will be so much better for all if this vast civilization opts for “Green China”.

Julian Cribb is a science writer and author of [*Surviving the 21st Century: Humanity's Ten Great Challenges and How We Can Overcome Them*](#) (Springer 2017).

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MAHB Blog: <https://mahb.stanford.edu/blog/green-china/>

ⁱ <https://www.theguardian.com/world/2015/aug/14/air-pollution-in-china-is-killing-4000-people-every-day-a-new-study-finds>

ⁱⁱ <https://www.rt.com/news/265186-china-water-air-pollution/>

ⁱⁱⁱ <https://www.weforum.org/agenda/2016/04/china-has-a-water-crisis-how-can-it-be-solved/>

^{iv} <http://www.smh.com.au/world/seven-deadly-sins-the-rare-animals-the-chinese-middle-class-love-to-eat-20160526-gp4qvw.html>

^v <http://theconversation.com/chinas-desertification-is-causing-trouble-across-asia-59417>

^{vi} <https://www.newsscientist.com/article/dn23212-china-takes-steps-to-clean-up-cancer-villages/>

^{vii} <http://thediplomat.com/2015/09/chinas-new-blueprint-for-an-ecological-civilization/>

^{viii} <https://qz.com/972897/china-is-selling-more-electric-vehicles-than-the-us-and-its-not-even-close/>

^{ix} <https://www.digitaltrends.com/cool-tech/china-solar-energy/>

^x <https://www.scientificamerican.com/article/why-china-is-dominating-the-solar-industry/>

^{xi} <http://www.cnbc.com/2017/02/13/china-and-us-lead-way-with-wind-power-installations-says-global-energy-report.html>

^{xii} <https://www.nytimes.com/2017/06/01/opinion/trump-paris-climate-change-agreement.html? r=0>

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- ^{xvi} <https://www.theguardian.com/cities/2017/feb/17/forest-cities-radical-plan-china-air-pollution-stefano-boeri>
- ^{xvii} <http://www.hortidaily.com/article/33640/China-100-hectare-urban-farming-district-comes-to-Shanghai>
- ^{xviii} <http://www.ibtimes.com/china-announces-ambitious-plan-clean-its-water-close-down-polluting-factories-1886320>
- ^{xix} <https://www.juancole.com/2017/04/leading-ecological-civilization.html>