CHINA FOCUS



Issue I / 2018

China's Green Shift: Is Your Business Ready?

Reconciling economic development with environmental protection is the struggle of our times. Growth and sustainability have proven, in most cases, to be inversely related. And few countries epitomise the "growth versus green" dilemma as well as China, where three decades of extraordinary growth have caused environmental degradation of epic proportions.

As a result, anti-pollution is now one of the "three key battles" China has pledged to fight over the next three years, together with financial risk and poverty. Since 2017, the central government has taken unprecedented action against environmentally non-compliant businesses and government officials, displaying enough political muscle to prove its point: China's green push is here to stay.

Does this mean China is willing to accept slower GDP growth for the sake of healthier, more sustainable development? Or will it be able to push through its environmental agenda without hampering progress?

How the "green versus growth" dilemma plays out at a country level is yet to be seen. But for international businesses operating in China, there is only one option: to make sure their growth projections remain on-track as they struggle to meet China's tougher environmental requirements.

Achieving this will not be easy - especially in the short term. On the **sourcing** side, companies must prepare for order delays and rising costs as a result of upstream factory closures. On the **production** front, they will need to invest in monitoring and minimising their environmental impact. And on the **sales** side, companies who transfer the cost burden of environmental compliance to clients can expect to lose out to competitors who meet those requirements more cost-efficiently.

In this China Focus, we argue that businesses who adjust to China's environmental requirements sooner rather than later, and do so in a strategic and systematic way, will be able to balance sustainability and success. In the process, China might even become the **birthplace of innovative solutions** that prove that "green" and "growth" are not mutually exclusive.

In this issue:

- China's Green Shift: Key Milestones
- Compliance in a Green China
- An "Environmental Health Check" for your China Production
- Sourcing Disruptions as China Goes Green
- Green Opportunities for whom?

KEY MILESTONES IN CHINA'S GREEN SHIFT

JAN 2015 | Revised Environmental Protection Law becomes effective



Violators now face **cumulative daily penalties** until issue is resolved



Authorities now have the power to **suspend/shut down** violators

2016 - 2017 | Environmental actions by the Central government



Investigated violations doubled in 2017 versus 2016



Total fines increased to US\$150m in 2017



12% of companies fined in 2016 were **foreign**

JUL 2017 | Ban on 24 types of imported waste announced

China is the **world's largest importer of recyclable waste.** The ban, which includes plastics and unsorted paper, will force many countries to find ways of recycling/disposing the waste they can no longer ship off to China.



1/3rd of plastics collected in Europe in 2016 was sent to China

JAN 2018 | Environmental Protection Tax Law becomes effective

China's first environmental tax system replaced the "pollutant discharge fee".

Stricter enforcement will more than double taxes collected.

2017





2018 (expected)



Sources: Ministry of Environmental Protection of the PRC, Xinhua, China Daily, Fiducia Analysis

The "green" direction in which China is heading matches the competitive strengths of international players.



Environmental scrutiny is not a new concern for chemical companies in China. But even they agree that recent anti-pollution efforts are unprecedented.

Mr. Zhu Qing-ping, CEO of FUCHS China, explains how the market-leading lubricants producer is adapting to this "new normal". FUCHS, a listed global company with German roots, entered China in 1988 and has since then expanded its local presence to two production facilities and 18 service branches. Mr. Zhu believes that meeting China's "green" challenge is a tough but manageable task for quality-driven foreign companies. The right approach, he suggests, is to combine innovative technical solutions with a conventional emphasis on compliance and continuous improvement.

Was 2017 a turning point for China's environmental policy enforcement?

We started seeing signs of impending change a few years ago, especially in larger cities. But it wasn't until 2017 that stronger policies started to be enforced and the pressure to comply grew substantially. There is a much stronger focus on the ongoing monitoring of environmental compliance. Previously, environmental considerations came into play primarily at the approval stage of a project. Now, companies are supervised more closely post-approval - and not only by the government. Local authorities have started sending third-party agencies to examine and monitor compliance as well.

Are third-party environmental supervisors a game-changer?

For companies like FUCHS, with strong antipollution mechanisms in place, the only implication is that we now have an extra layer of reporting and supervision. But for businesses with weak pollution controls, it means that they can no longer get away with it - having a good relationship with local authorities is no longer enough.

Do China's stricter environmental regulations affect foreign and domestic companies equally?

Yes. It's a mistake to assume that the antipollution drive is targeted at foreign companies. Most businesses that have been shut down were local private companies. Foreign companies have actually been less affected because they tend to have more environmental and compliance awareness.

Which regulations pose the biggest hurdles for chemical companies like FUCHS?

Total pollutants discharge quotas – China's long-existing discharge quotas are now being implemented much more strictly. Each company has a maximum quota of polluting by-products - such as solid hazardous waste – that it's allowed to discharge. The limit is calculated based on the industry, region, and the company's production capacity. Exceeding this threshold carries a heavy fine.

EIA approval – Before constructing or expanding a production site, companies must submit an Environmental Impact Assessment (EIA) report detailing the project's pollution-related implications and prevention mechanisms. A few years ago, passing the EIA was unproblematic. Now, it's difficult for chemical companies to get approval unless they're located in a chemical industry park. This makes the search for a suitable factory location harder, and it's leading to industrial transfer away from tier 1 cities.

What key actions has FUCHS taken to adapt successfully?

New location – The new plant we're building in Suzhou's Wujiang district will replace our

existing one in Shanghai, where obtaining EIA approval would have been more complicated.

Product innovation – We continuously develop environmentally-friendly lubricants that reduce toxic discharges for us and our clients. Helping them meet environmental targets gives us a competitive edge.

Process innovation – We're always analysing our production process to identify opportunities for environmentally-friendly engineering solutions, such as the process of "reduced pressure distillation" that we're now using to collect treated/reusable fluids from our waste liquid.

Collaboration with customers – We have created innovative packaging solutions to increase reusability across the supply chain, and we're helping clients to extend the product life of our lubricants by using filters.

External experts – It's very difficult for a foreign company alone to solve environmental compliance issues comprehensively because it requires a lot of new technical knowledge and regulatory understanding.

Do you have recommendations for foreign companies with production sites in China?

Apart from supporting the government's anti-pollution drive, foreign companies should proactively **foster communication** with authorities and bring suggestions to the table, especially when new regulations or guidelines are being reviewed. They should also bear in mind that the "green" direction in which China is heading matches the competitive strengths of international players. The advantage for foreign firms is that environmental sustainability, technological innovation, and overall compliance are not new priorities. ®



FUCHS sees growing potential for environmentally friendly products in the Chinese market. Their new PLANTO biogenic lubricants contain a high share of renewable raw materials and are rapidly biodegradable.



An "Environmental Health Check" for your China Production

iducia's "Environmental Health Check", explained below, is designed to help industrial companies drive environmental improvements in a systematic and strategic way. Beyond ensuring compliance, this approach enables our clients to turn sustainability into a source of competitive advantage by minimising the cost burden of environmental compliance - and doing so sooner and more effectively than competitors. 80

1. Regulatory review

Result:

Analysis of existing and upcoming environmental regulations ranked by relevance.

Method:

Cataloguing existing regulations and monitoring upcoming ones, realitychecked through interviews with authorities and experts.



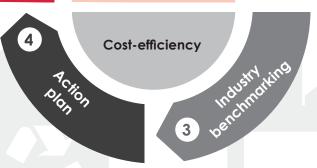
4. Action plan

► Result:

A timeline of recommended actions covering technical solutions and management measures.

► Method:

Strategy based on analysis of internal and external factors through Fiducia's multiple client projects.



2. Internal review

Result:

A detailed report of compliance risks in the client's supply chain and production process, ranked by urgency.

Method:

Supply chain and internal process analysis, including interviews with internal stakeholders, suppliers, and vendors.

3. Industry benchmarking

► Result:

A summary of industry trends and applicable solutions implemented successfully by comparable companies.

Method:

Interviews with companies in related sectors to identify workable, compliant, and cost-efficient solutions.

QUICK TAKE | How is China's Green push disrupting sourcing?

ompared to companies who produce in China, those sourcing from China are being hit less directly by the government's anti-pollution drive. But the implications they're facing are equally profound. **Managing Director of DIY Trade Far East** Limited, HELLWEG's buying office in Asia, Tamás Pollich gives us an insider's view.

Key implications:



Rising prices

"In 2017 we saw marked price rises in product categories that were highly exposed to steel and carton prices."



Extra workload

"Searching for alternative suppliers in less affected regions, and following up more closely with suppliers to prevent delays, required additional efforts and time."

Key actions:



Monitor raw material prices

"We follow raw material reports on a monthly basis to track changes in key cost drivers."



Improve communication

"Suppliers are a valuable source of information. Deepening our communication with them keeps us up to speed with regulatory and price developments."



Review supplier base

"Small to medium-sized manufacturers in specific regions are more affected by new regulations. We're evaluating our supplier base with this in mind to ensure stable prices and quality for our products."



Tamás Pollich, DIY Trade Far East Limited

🙀 How Fiducia can help

- Supplier search & evaluation
- Ongoing supplier management
- **Negotiation support**
- Cost benchmarking
- Supply chain planning & optimisation

or most manufacturers, China's antipollution drive is setting up costly and time-consuming "green tape". But for green tech companies, it's opening up fields of opportunity.

To reach its environmental objectives, China will require an estimated public and private expenditure of over US\$450b annually over the next four years. The new **Environmental Protection Tax**, in particular, will boost spending on monitoring equipment and clean technologies, as it requires public and private entities to monitor and reduce their emission of solid, air, water, and noise pollutants.

The question is - will there be room for foreign companies in this flourishing market? There's no doubt that the Chinese government is hoping to empower domestic green industries. Renewable energy, for instance, is also strongly encouraged under the "Made in China 2025" programme.

But international players can also expect to see gains. As the clock ticks for China to meet the ecological targets set forth in the 2016-2020 13th Five Year Plan (13th FYP), it will inevitably rely on foreign green technologies that are not yet locally available. The government is well aware of this - in 2017, it issued guidelines to boost foreign investment in green technologies, especially for manufacturing applications.

Nevertheless, market access continues to vary greatly by region, product, and industry. International players have only a 2% share of the wind power market, for instance, whereas their participation in the wastewater treatment industry is much larger. A detailed analysis is, therefore, necessary to gauge potential for your particular service/product and identify the best route to market.

Below, we provide an overview of two of the sectors where the outlook for international players is particularly promising.

Will international players have access to China's green tech market?



Key drivers:

- ► The revised "Water Pollution Prevention and Control Law" (effective as of 2018) has increased emission-related penalties and forced businesses to monitor water pollutants.
- ► China's **13th FYP** set concrete waterrelated targets to be reached by 2020, e.g. increasing wastewater treatment rates from 92 to 95 percent in urban areas and from 20 to 50 percent in rural regions.

Key sectors:

- ▶ Municipal: two thirds of China's wastewater discharge is municipal. Local governments are under growing pressure to improve and expand treatment facilities.
- ▶ Industrial: 25% of China's discharged wastewater is industrial. Demand for inhouse water treatment technologies will grow among manufacturers, as wastewater disposal becomes a key cost driver in China.

Key technologies in demand:

- Advanced filtration / membrane separation system
- Water disinfection equipment
- Wastewater treatment chemicals
- Advanced piping/ pipe coating materials
- Monitoring equipment



Key drivers:

- ► Insufficient waste processing capacity: China recycles 5% of its construction waste (compared to 90% in Europe) and can only process 60% of its industrial hazardous waste.
- ► The new **Environmental Protection Tax** raises the cost of solid emissions. The tax rate on solid waste can reach up to US\$160/MT. Hazardous waste is taxed most heavily.
- ▶ In 2016, the "National List of Hazardous Waste" was expanded from 362 to 479 items, reflecting new research findings and more refined waste type definitions.

Key sectors:

▶ Industrial parks: the demand for hazardous waste disposal plants in China's industrial parks is set to grow, as manufacturers seek easy access to centralised waste disposal facilities, and as the government actively encourages industrial transfer away from densely-populated areas.

Key technologies in demand:

- ► Hazardous waste (including medical and chemical) treatment and disposal
- Hazardous waste handling equipment
- Smart sorting and collection system
- Recycling process expertise
- ▶ Brownfield site remediation equipment
- Recyclable fibres and degradable plastics &

Publisher: Fiducia Management Consultants
Editor & contact for press and article reprints:
contact@fiducia-china.com

All liabilities excluded. This publication is based on information obtained from sources (government, business associates, companies, publications, etc.) we believe to be reliable.

However, Fiducia Management Consultants does not take any responsibility as to its accuracy, completeness or correctness.

Copyright © 2018 Fiducia Ltd. All rights reserved. Protected by copyright laws.

Beijing

Room 10, 11/F, The Exchange Beijing, 118B Jianguo Road, Beijing 100022 China

Tel: +86 8523 6308

Hong Kong

15/F OTB Building, 160 Gloucester Road, Wanchai, Hong Kong China

Tel: +852 2523 2171

Shanghai

Unit 604-605, Central Plaza, 227 Huangpi North Road, Shanghai 200003 China

Tel: +86 21 6389 8288

Shenzhen

1308 Di Wang Commercial Centre 5002 Shen Nan Dong Road Shenzhen 518008 China

Tel: +86 755 8329 2303

