





# BUILDING CHINA'S GREEN FUTURE

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*Five challenges to going green in China –  
and how Swedish collaboration unlocks progress*

  Pioneer the possible.

# JOINING FORCES TO SPEED UP CHINA'S GREEN TRANSITION

*China is a critical market as Swedish companies ramp up their efforts to pioneer the global green transition. Here's a look at how five local sustainability challenges can be overcome.*

Climate change is the biggest challenge of our time. A sustainable future is possible, but it requires major commitments at all levels: government, the business community and civil society need to collaborate to change our consumption and production patterns to create a world where both people and nature can prosper.

As the world's largest emitter of carbon dioxide according to the IEA, China's green transition is critical to the success of the global green transition. Fortunately, Chinese policymakers have long pointed out that sustainability is key to the long-term goal of transforming China into a modern socialist country by 2049. To reach this goal, Beijing has pledged to peak carbon emissions before 2030 and achieve carbon neutrality before 2060. Guidelines to successfully implement change have started to take form, and include accelerating the development of a clean, low-carbon, safe, and efficient energy system.

But in China, like in many countries, short-term economic concerns tend to trump longer-term sustainability efforts. With sluggish economic growth, a property sector in crisis, and a business community hit hard by pandemic controls, climate action has not been moving at the pace needed. Moreover, reaching China's sustainability targets will require new, innovative solutions and pioneering collaborations. This is where Swedish companies can play an important role and support China on its path to a greener future.

Business Sweden is working with 12 leading Swedish companies whose innovative solutions are a perfect match to help speed up China's green transition. This report sheds light on five sustainability challenges facing Swedish companies in China, and how collaboration through our 'Pioneer the possible' platform can pave the way for progress.



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# SWEDEN LEADS THE WAY IN SUSTAINABLE DEVELOPMENT

Sweden is a well-known sustainability frontrunner and is continuously ranked as leading the transition towards a more sustainable future. Many Swedish companies have set ambitious global sustainability goals with clearly defined targets and roadmaps for how to achieve them.

The implementation phase is well underway with a strong focus on innovation, proactive integration of upstream and downstream value chains, and new ecosystems that engage a wide range of local stakeholders (suppliers, customers, authorities, etc.).

But despite their leading position, high ambitions, and alignment with the Chinese government's climate goals, Swedish companies still experience challenges in making their operations in China greener. These challenges include creating supply chain transparency for carbon emissions, accessing clean and renewable energy, and bridging the gap between customer perception of sustainability and Swedish companies' ambitions.

## *Pioneer the possible: a springboard for change*

To address these challenges, Business Sweden has launched the platform 'Pioneer the possible' in China – a forum where Swedish companies collaborate, share best practices, and come up with new ideas to tackle sustainability challenges in the market. While membership is exclusive to Swedish companies, the issues concerning the green transition are shared by all companies doing business in China – both foreign and domestic. By sharing experiences and learnings from tackling challenges across industries, we hope to not only bring value to participating companies, but also contribute to Chinese, Swedish, and global sustainability goals.

***Pioneer the possible*** is a collaboration platform launched by Business Sweden in China in 2022 together with Team Sweden partners. The platform focuses on four main themes:

- Supply chain and circularity
- Green production
- Green mobility
- Sustainable urban development

The platform aims to both **support** Swedish companies in reaching their carbon neutrality goals and **promote** Swedish sustainable solutions in the Chinese market.

Read more here



[ptpchina.swedenalliances.com](https://ptpchina.swedenalliances.com)

# FIVE CHALLENGES FACING SWEDISH COMPANIES IN CHINA

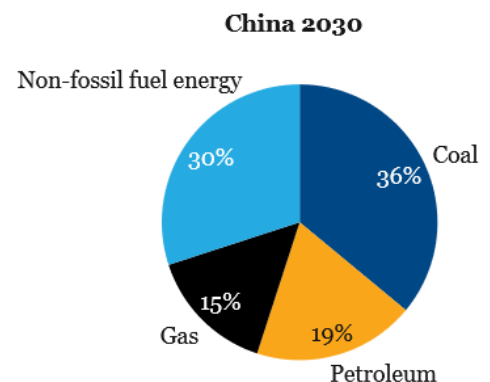
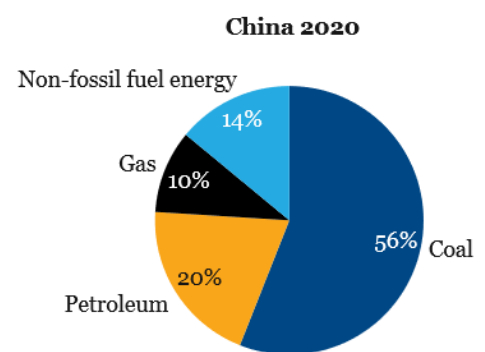
Below are five sustainability challenges identified by Swedish companies in China and how we have taken joint action in the 'Pioneer the possible' platform to address them, one by one.

## *1. Access green power for manufacturing*

Securing access to renewable energy is one of the biggest challenges for Swedish companies that want to reduce their carbon footprint in China, largely for two reasons. First, renewables account for only a small share of China's energy mix at around 15 per cent, making it relatively hard to come by. The remaining 85 per cent is made up of coal, oil, and natural gas. Second, while the share of renewable energy is quickly increasing, accessing these resources can be challenging. Large geographic distances between where renewable energy is produced and where it is consumed by companies constitute the lion's share of this problem. For provinces with many companies and few renewable resources there is often higher demand for renewable energy than there is supply.

Through the 'Pioneer the possible' platform Swedish companies have identified several ways in which access to renewable energy in China can be made easier. By pooling together green energy demands, Swedish companies strengthen their bargaining power in relation to energy suppliers. Companies with a larger carbon footprint could also consider their own localised energy production, in addition to purchasing green energy from the grid. This can be done by installing solar cell panels on workshop roofs or by placing small wind turbines at the production site.

The advantages of offsetting a company's carbon footprint in China is not only environmental, it also comes with clear benefits from the Chinese government. For example, companies can acquire the Green Factory certificate and other recognitions of green operations which can lead to government subsidies and/or competitive advantages in the market.





## How to make your energy supply greener in China

- Start by understanding current and future energy requirements
- Set clear goals for share of energy from renewable sources, keeping in mind the trade-offs and potential additional costs
- Discuss future demands with current energy supplier and convey need for higher share of renewables
- Explore various options for localised energy generation, including PV, wind, or hydropower
- Continue to improve operations and adopt the latest high-efficiency technologies to reduce total energy consumption



## *2. Create supply chain transparency and traceability for carbon emissions*

Obtaining clear data on carbon emissions from local supply chains is a pressing challenge for Swedish companies in China. Without this information, it is impossible to accurately measure the impact of current sustainability efforts and/or to work out what further measures need to be taken.

Without a clear picture of a product's journey from raw material to end product, from supplier to end consumer, it is impossible for companies to make promises on carbon footprint. The first step toward sustainability is to be able to track and measure the current carbon footprint across the whole value chain.

In China, a complicating factor for accessing clear emissions information is that the country still lacks a completed disclosure system for CO<sub>2</sub>. While key components of such a system are under development, including unified disclosure standards, incentives and penalties, and a third-party verification and auditing system, a nationwide rollout is still some way off. In addition, there are differences between China's current corporate carbon emission accounting guidelines and international practices, which adds to the confusion for businesses.

To help tackle this challenge, 'Pioneer the possible' members agree that transparency, collaboration and communication are key. Companies need to strengthen their collaboration and communication with a) suppliers, to set and work together towards a common goal, b) consumers, to jointly monitor the carbon emissions of companies and their suppliers, and c) between industries and policy makers. For example, in the field of new energy vehicles, industry and government could work together to create an ambitious yet achievable carbon footprint management system that covers the whole production chain, from raw materials to end-of-life recycling.

Swedish companies could also benefit greatly from communicating more and sharing best practices with each other. Innovative solutions used by Swedish companies to improve supply chain transparency and traceability include working with suppliers to apply blockchain technology to enable ethical sourcing and global traceability of raw materials, helping suppliers reduce

### **How to improve supply chain transparency and traceability**

- Set clear carbon reduction targets and develop a roadmap that is implementable. The roadmap should be shared with suppliers to jointly achieve all objectives
- Establish clear green procurement rules and regulations, and conduct regular audits to ensure compliance
- Continuously support suppliers to improve their carbon management capabilities through capacity building training etc.
- Strengthen communication with relevant stakeholders



carbon and wastewater emissions during production, and enabling the recycling and reuse of critical components such as batteries through innovative product design and leading-edge recyclable materials. Finding inspiration and learning from each other is a key lesson from the 'Pioneer the possible' platform, highlighting the need for knowledge sharing, new innovative ways of thinking, and cross-sector cooperation.

It is also worth highlighting that the impact created by measuring the carbon footprint of Swedish companies in China goes beyond each individual company. Requiring measurability from upstream and downstream business partners will push domestic companies to implement their own emission reduction strategies and therefore contribute to a greener global value chain.



### *3. Bridge the gap between customer demand for sustainability and your own ambitions and goals*

In China, Swedish companies often experience a discrepancy between their sustainability ambitions and consumer awareness and willingness to prioritise sustainability over price.

As sustainable products often come with a higher price tag than conventional products, Swedish companies need to attract customers who appreciate the value added in terms of lower climate impact. This has so far been a difficult circle to square in China, as consumer awareness of sustainability has been relatively low. What is encouraging to see, though, is that demand for sustainable products and solutions has been rising steadily over the past couple of years and is projected to keep climbing as the Chinese middle class continues to expand. This trend offers a great opportunity for Swedish companies and their sustainable solutions.

To turn the sustainability approach into a competitive advantage, understanding the target audience is key. Companies need to ask themselves questions, such as: How do end users prioritise sustainability performance? What motivates customers to buy more eco-friendly products, reduce carbon emissions, and recycle their waste? Are customers more encouraged by government pressure, influence from social networks, or their own good intentions? By cracking the mindset of your target audience, you can develop more tailored strategies to engage customers on sustainability issues, on their terms.

For industrial companies whose customers are business owners, it is crucial to help customers meet government requirements by offering alternative low carbon solutions. Targeted communication focusing on sustainability on different occasions, such as trade shows, distributor conferences, and client meetings, will help improve alignment between companies and their customers.

*“The platform has been an eye-opener!”*

Elisabeth Lindstrom Dupuy, President,  
Sandvik China Holding Co., Ltd.



For companies who are involved in retail business, transparent communication and messaging on the direct impact of consumers behaviour can pave the way for more sustainable decisions. Tapping into targeted campaigns, such as the emerging “Carbon Inclusive” guiding mechanism in which small and micro businesses, community households, and individuals can get credits for upholding low-carbon lifestyles, could also be a way for Swedish companies to help shape a more sustainability-minded customer base.



#### *4. Understand regulations and policies in China*

Understanding and keeping up with developing policies and regulations on sustainability in China is a key challenge for Swedish companies.

Since China announced its ambition to peak carbon emissions before 2030 and achieve carbon neutrality before 2060, the central government have issued a number of guiding documents and policies to ensure that the targets will be reached. A policy framework to guide implementation from the national to the local level was established in 2022 and region-specific plans have since been developed under this structure. While it is encouraging to see so much being done to ensure China reaches its carbon emission targets, the vast number of new policies and plans have led to some confusion. Given the sheer number of policies, as well as disparities in implementation, Swedish companies may struggle to understand the policy impact and to identify key stakeholders to engage. This has been especially challenging for companies who are present in more than one location.

To better understand Chinese policies and regulations, Swedish companies should set up internal processes to closely monitor the changes to legislation or regulations and assess their impact on business. Companies should also consider collectively engaging and interacting with policy makers, thereby improving their chances of influencing policymaking and of gaining a better understanding of current policies. For dealing with specific topics or individual cases, market research specialists and legal consultants should be involved to ensure compliance.

A key role of the ‘Pioneer the possible’ platform is to provide updates on China’s policy development and engage stakeholders on different topics through workshops and in-depth discussions. Moreover, the insights and practical experiences of peers from different industries are a source of learning and inspiration, and once again highlights the value of dialogue and cooperation when navigating a complex landscape.

*“The ‘Pioneer the possible’ platform is both a promotional platform, but also a very hands-on, problem-solving forum where we share and discuss our challenges, and come up with innovative ways of going forward.”*

Amanda Alkemark,  
Program Manager for  
*Pioneer the possible* in China

## *5. Overcome the challenges of circularity*

Swedish companies who source and produce goods in China are also facing challenges with circularity, from finding recyclable and innovative materials to ensuring recyclability through product lifecycles.

Between 2005 and 2020, China issued more than 30 laws, regulations, and administrative documents to standardise the development of a circular economy. There is, however, much left to do. One reason Swedish companies are currently struggling is the lack of lifecycle assessments of the recycling solutions in place, which has resulted in a failure to properly assess the economic cost-effectiveness, resource and environmental benefits, and energy and carbon emission benefits of current efforts.

Sweden is a global leader in circular economy. That is not only because Sweden is already a frontrunner in circular technologies and solutions (spanning the entire product lifecycle, from collecting and sorting to treating and reusing), but also because Swedish companies continue to explore new solutions and partners to achieve zero waste. Therefore, there is much Swedish companies can share with Chinese stakeholders to support the development of China's circular economy and improve the circularity of specific supply chains.

But Swedish companies can, and aim to, do even more. In China, there are several areas in which Swedish companies would like to take their circularity efforts further, including by exploring resources of high-quality recycled materials and integrating the efforts by government and original equipment manufacturers (OEMs) on component value retention. Going forward, the 'Pioneer the possible' platform will continue to focus heavily on this agenda to help Swedish companies contribute even more to creating a circular economy.

*“The bold climate targets need to be supported by concrete actions, and we have been thoroughly impressed by our members' direct efforts to reduce their carbon footprint in China.*

*Pooling together our push for renewable energy has given us a much louder voice when speaking to local authorities, and sends a clear signal to the market that Swedish companies are pioneering the green transition.”*

Thomas Larsen, Project Manager  
Green Production, *Pioneer the possible* in China



## How to accelerate circular economy in supply chains

- Emphasise the design phase in circular economy models as a key starting point to ensure that products are recyclable or made of highly sustainable materials that can be re-manufactured and reused
- Use innovative technologies to cut waste, reduce environmental footprint, and lower industrial operating costs (e.g. treat and recycle industrial wastewater for reuse)
- Use big data and intelligent systems to manage city waste
- Explore cross-sector cooperation (e.g. garment brands working together with innovators and supply chain partners to create new recyclable materials)
- Research and develop wood-based fibres for the textile industry to reduce carbon emissions





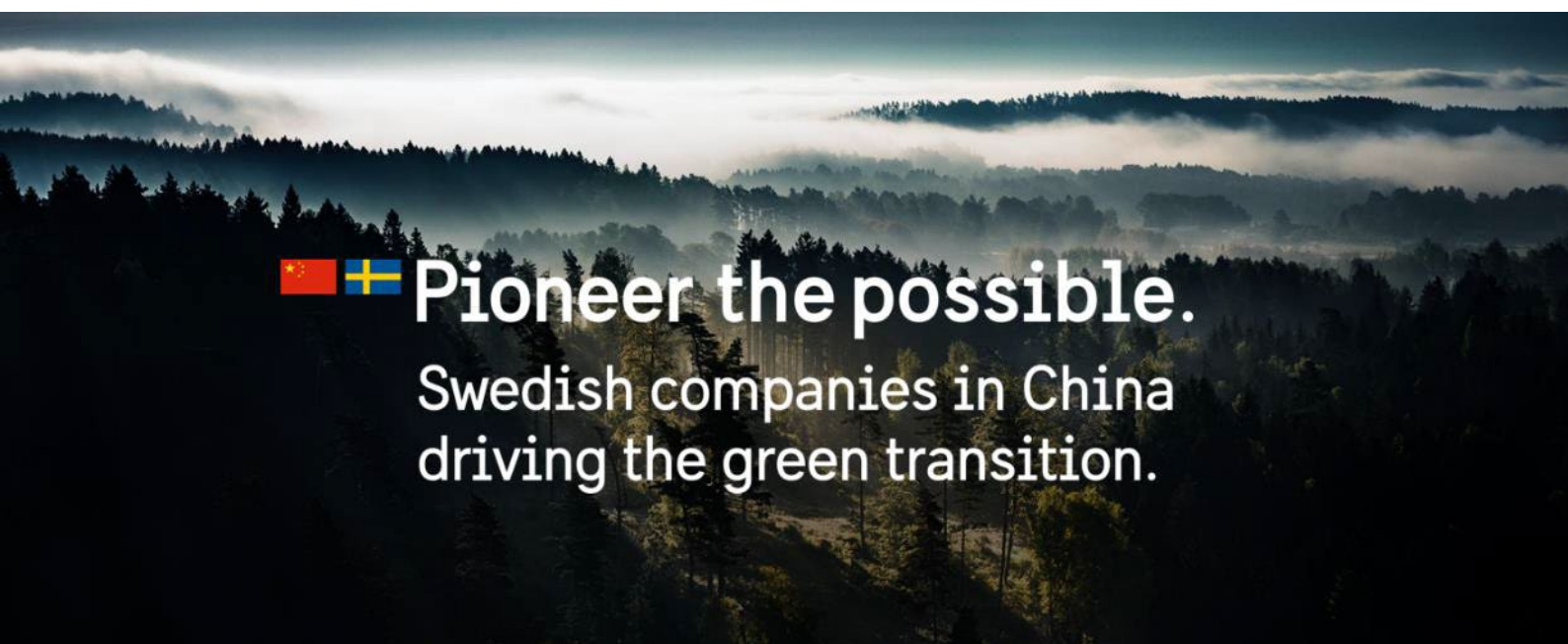
# TIME FOR ACTION IS NOW



Given the complexity of the Chinese market and the urgency to tackle climate change and achieve the carbon neutrality goals globally, Swedish companies need to set clear local targets and strategies, and incorporate them across internal operations, in all markets. In addition, establishing functions and processes for managing carbon assets and collaborating closely with all stakeholders – suppliers, peers, and customers – is a critical step. This helps to identify challenges and paves the way for co-developed solutions.

The mission of achieving carbon neutrality and a greener future requires commitment, new innovative solutions and close collaboration between countries, businesses, and individuals. Swedish industry continues to lead the way in making Chinese factories greener, not only to achieve internal sustainability goals but also in to advance the green transition in the world's second largest market. With high ambitions, clear goals, strategies and collaborations, a sustainable future is within our reach.

Together, let's pioneer the possible.

*Want to know more about the 'Pioneer the possible' platform? Contact us (see details below) to find out how we can help you tackle sustainability challenges in China or other markets.*



  **Pioneer the possible.**  
Swedish companies in China  
driving the green transition.





*We help Swedish companies grow global sales and international companies  
invest and expand in Sweden.*

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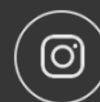
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