

THEME 01

# Will China become the global sustainability leader?

SUSTAINABILITY

CHINA

U.S.

The U.S. has officially withdrawn from the Paris Agreement and the EU faces resistance from member states to collectively adopt effective long-term climate action plans. Against this backdrop, many look to China to take the lead in fighting climate change. The superpower is ahead of reaching its “Paris targets” and expects its greenhouse gas emissions to peak by 2030. While China’s top-down approach is expected to be successful in implementing climate policies, it also has its caveats and both the EU and the U.S. have their own strengths that may prove key to successful climate action.

## Our observations

- The U.S., China and the EU each play a crucial role in fighting climate change as they are the biggest polluters. The European Union’s collective ecological footprint is the world’s [third-highest](#), after the U.S.’ and China’s.
- In April, the EU and China affirmed a [commitment](#) to tackling climate change and promoting clean energy. During the latest G20 summit, France and China [called](#) on countries to “continue to uphold multilateralism and inject political impetus into the international cooperation on jointly fighting climate change”. In a joint statement with France, China even declared plans to upgrade its contribution to the Paris Agreement, committing to also raise the share of clean sources in its energy mix to 20% by 2030. China will publish a long-term decarbonization strategy by next year. Meanwhile, in a separate paragraph, the U.S. withdrew from the Paris agreement, arguing “it disadvantages American workers and taxpayers”.
- China’s rapid economic development has come with high environmental costs and it is now the world’s biggest greenhouse gas emitter. Its emissions have [roughly tripled](#) since 2001, when China joined the World Trade Organization and began expanding its manufacturing sector. China is responsible for burning [50%](#) of the world’s coal supply each year, for the most plastic pollution in the ocean and a global rise in CFC-11 emissions, which is globally banned and classified as hazardous to the ozone layer.
- Recent policies and measures show that China is assigning more weight to the quality of growth. The country has taken significant steps to promote clean energy in recent years, as we wrote [earlier](#). Globally, China leads in [solar power](#), has added vast amounts of wind and solar generation to its grid, and upgraded the domestic industry of [electric vehicles](#). China’s most [effective emissions-cutting policies](#) so far are [feed-in tariffs](#) that establish long-term prices for renewables projects; energy-efficiency standards for power plants, vehicles, buildings, and equipment; targets requiring utilities to procure a set proportion of electricity from clean sources; and caps on coal consumption.
- For China, and others, reducing greenhouse gas emissions goes hand in hand with other policy objectives. E.g., the shift away from fossil fuels also serves its energy security agenda and, perhaps most importantly, it is an important element in the nation’s fight against, deadly, urban air pollution. Additionally, global climate leadership is a vector for soft power, greentech is an important growth sector for Chinese enterprises (e.g. in solar panels and batteries) and the country is the world’s leading supplier of key minerals for many sustainable technologies.



## Connecting the dots

The fact that China has adopted ambitious climate action goals leads many to believe the Asian superpower will be the new leader in global climate mitigation. China has already shown successes in increasing the share of renewables in its energy mix and implementing climate policies with the country's top-down governance approach. Is China indeed poised to become the global sustainability champion? Or will the EU or the U.S. be able to catch up with their own approaches?

China's vigorous climate plans (starting from 2008) and its rigid approaches such as preventing polluting enterprises from receiving state bank loans are seen as a solution to the global climate problem. However, whether China's state-led, top-down sustainability policies will be successful in the long run can be questioned because of three reasons. First, China's climate governance can be described as a [multi-level system](#) in which local and regional governments experience increasing levels of delegation. Successful implementation of China's plans depends on the active participation of local authorities and some scholars expect more [tension and political conflict vis-à-vis these plans](#). Second, many Chinese are negatively affected by large-scale renewable energy infrastructure projects, e.g. building hydropower dams typically requires displacing many citizens against their will (1.24 million for the [Three Gorges Dam](#) alone) and lead to environmental problems in their own right. This might further create resistance among local communities. Third, one of China's main drivers in reducing the use of coal is domestic air quality (and the related health problems) and the country may care less about climate change per se. As a consequence, it appears to have little restraint when it comes to exporting fossil-based technology to other parts of the world. The Belt and Road Initiative (BRI) can be viewed as a touchstone to test China's genuine global leadership in sustainability. In April this year, Xi Jinping pledged to make the BRI clean, green and financially sustainable. The question remains how feasible that is. Several green guidelines relevant to the BRI have been released, such as the Guidance on Promoting Green Belt and Road and the Belt and Road Ecological and Environmental Cooperation Plan, entailing 25 green BRI pilot projects, and a project preparation fund is being created that may particularly enhance integrated environmental assessments. However, these initiatives are [in their infancy and the guidelines are not binding](#). Especially the construction of coal power plants along the BRI has a [major environmental impact](#). Indeed, the effectivity of China's top-down approach is uncertain.

The other two most polluting superpowers, the U.S. and the

EU, have their own strengths and weakness towards becoming global climate leaders. The EU is seen as a climate-conscious power, but it faces resistance from member states to [collectively adopt](#) effective long-term climate action plans and, compared to the U.S. and China, it is [lagging behind in green technology](#). Still, Europe is considered to have a first-mover advantage with regard to monitoring and reporting climate change. To this end it employs the technologies developed under the EU 2020 strategy objectives in this area; smart grids, cloud computing and mobile geographical information systems-based (GIS) technologies. Furthermore, [Europe's carbon trading system](#) has been in place for many years and the EU has learned from its experiences and made it more effective. Finally, the mandate from the European people, even if polarized, is growing. During the last European elections, the Greens made major wins in multiple European countries, creating a push for climate policies from bottom-up. Also, citizen-led climate litigation cases in Europe have [sparked similar cases all over the world](#). The U.S. is least associated with climate leadership among the three superpowers, mainly because of Trump's refusal to take the issue seriously. However, this does not mean that at state-level, new champions are not arising. Climate action is often led by individual states. For instance, both [California](#) and [New York](#) have recently set some of the world's most ambitious climate targets. Although the two states account for only a tiny portion of global emissions, their efforts create insight into what climate policies are effective. Furthermore, these progressive states are pushing and inspiring other states to adopt climate measures and pressure the [federal government](#) to act. Similarly, there are many American NGOs in the field of climate change that play a decisive role in increasingly active participation on a local level (something that China lacks). On a more speculative note, if the Democrats win the 2020 elections, the U.S. might undergo a wave of environmental regulations, as we noted [earlier](#).

As the world's three biggest polluters all have key strengths in making climate policies effective, the future will show how they will further learn from each other's successes and form feedback loops together in the path to sustainability. The Chinese approach of long-term planning and rigorous implementation could be combined with Europe's conscious consumer and experience in regulating the market and the U.S.' state-level competition in sustainability. For instance, inspired by Europe, China is to implement its national carbon trading system by 2020. By creating an [environmental social credit system](#), China has the chance to become more effective than Europe with its carbon trading system.

## Implications

- The U.S., and particularly California, as the most bustling hub of clean technologies, might further take the lead in green technology as the private sector drives innovation. However, this would by no means be enough to curb emissions. The UN has [warned](#) that using green technology may be less beneficial because of instances in which technologically-driven advances in energy efficiency increase, rather than decrease, consumption, leading to net-zero (or worse) emissions (cf. water-saving shower heads).
- The European-inspired carbon trading system and the reaffirmed commitment to the Paris Agreement mark the beginning of a growing partnership between China and the EU concerning climate action.