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EU China Environmental Policy Cooperation: Who Benefits?

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Introduction

There are many aspects of governance where China has little to learn from its international partners. However, environmental issues are of increasing concern at all levels of Chinese society. The failure of the Chinese government to make significant progress in terms of issues such as air quality has raised concerns about the ability of the PRC to provide one of the most important public goods. This paper reviews the possible impacts of the EU-China Environmental Governance Programme (2011-2015) and discusses the reality what might be achieved given the poor response to the current crisis. In particular the need for a more global approach throughout China and the need to implement existing measures rather than simply relying declarations which promote the possible sharing of advanced technology with China to diminish the pollution. The paper will be informed by research which is currently underway in the PRC in terms of the way that Chinese media reports upon the variability of practice within the PRC. It will demonstrate that it is not a lack of technological expertise that is at issue, but the lack of coherent policy implementation. (This is not to suggest that access to improved technology will not be helpful.) Policy implementation is certainly assisted in Europe when there is an informed debate by the public about the consequences of environmental inaction.

The issue of China's environment does matter to the EU. It is not a case of just curiosity spurred on by TV pictures of extreme air pollution in Beijing. This issue matters because

- China's greenhouse-gas emissions were about 10% of the world's total in 1990. Now they are nearer 30%. Since 2000 China alone has accounted for two-thirds of the global growth in carbon-dioxide emissions.
- This means that EU's contribution to ameliorating the causes of global warming will be limited because of the growing environmental problems within China.

The Chinese Economy

The Chinese economy has benefited from a very long period sustained economic growth, especially since the market based reforms introduced under the leadership of Deng Xiaoping. During this period of exceptional growth China has risen to be in a position where it is may become the largest economy in the world in 2014 (Giles, 2014).

China's main emphasis since the creation of the new state was always to achieve rapid economic growth, in many cases almost regardless of the social costs involved. Throughout the period government has relied upon five year plans (FYP) to set targets for economic achievements. There was very little concern, until recently, about environmental issues despite a massive rise in GDP per capita. However it became clear by the time of the new millennium that that this level of industrial growth had become unsustainable.

Table 1 China's Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons)

| Year | Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons) |
|------|---|
| 2007 | 6,326.365 |
| 2008 | 6,684.651 |
| 2009 | 7,573.380 |
| 2010 | 7,997.044 |
| 2011 | 8,715.307 |

Source: US Energy information Administration (EIA, 2013)

From the above it is clear that China's emissions of CO₂ from energy consumption continued to grow even when industrial output faltered during the global recession, however, this growth in emissions was at a lower rate than the rise in GDP.

The Chinese Environmental Dilemma

Whilst China was in the earliest stages of development after the opening to market forces, the priorities were economic growth and political stability. Now many of the priorities have changed with a greater emphasis on environmental protection, sustainable industrial output and an overall improvement in the quality of life. The problem is that that to achieve this, there needs to be a rebalancing of the economy and a movement towards more effective enforcement of environmental standards. Certainly there is more environmental information available, so for example Chinese airports display information about pollution levels in destination cities (Stratfor, 2014). The provision of this information does not however mean that much can be done about one of the basic facts of life, apart from staying indoors or avoiding the cities altogether.

China, like many other countries who have gone through a development process, now faces an environmental turning point. This occurs when the environmental crisis becomes so severe that it is felt that urgent action has to be taken. In terms of the UK it was December 1952 when the London ground to a halt for nearly week in December, in China it may well have been that January 2013 was that point. This was described by the Economist as an "airpocalypse"

“The fetid smog that settled on Beijing in January 2013 could join the ranks of these game-changing environmental disruptions. For several weeks the air was worse than in an airport smoking lounge. A swathe of warm air in the atmosphere settled over the Chinese capital like a duvet and trapped beneath it pollution from the region’s 200 coal-fired power plants and 5m cars. The concentration of particles with a diameter of 2.5 microns or less, hit 900 parts per million—40 times the level the World Health Organisation deems safe. You could smell, taste and choke on it.” (Economist, 2013)

Sadly this kind of environmental disaster has been repeated on a number of occasions since across large parts of China, but it is clear that the government is prepared to put significant resources into dealing with the problem. The extent of the problems was emphasised by Zhu Chen a former Health Minister and a senior member of the government wrote in the *Lancet* that they believed that air pollution was the cause of between 350,000 and 500,000 premature deaths per year (Zhu Chen, 2013). It is not just the air quality that is of concern. Reports that China’s six biggest river systems consisted of water considered undrinkable throughout 85% of their length even after treatment and groundwater pollution has risen from 37% in 2000 to 60% in 2013 (Economist, 2014).

One important step to move forward the campaign against pollution has been to monitor and publish the air quality in the big cities which began in 2013. In addition the Chinese government began direct monitoring of 15,000 heavy polluters in 2014. However the data gathered from the monitoring of these power plants, steel mills and other industrial facilities nationwide will only be made public via annual reports. This detracts from the urgency of the situation, especially as many of the facilities are accountable to local and regional governments which have close links with industry (Hornby (A), 2014).

The public, especially the middle classes, are well aware of the situation and communicate their individual finds via social media and smart phones, for example posting instances of pollution on Weibo (Hook, 2013). The problem for the Chinese government is still that much of their environmental activity tends to be of the bureaucratic type with little to show the people and a reluctance to share information. Hence the cynical adaption of Chairman Mao’s slogan of “Serve the People” into “Serve the People Smog” (Hornby (A), 2014). However in an attempt to move things forward, the Chinese premier Li Keqiang, declared a “war on pollution” in March 2014. And the Ministry for Environmental Protection announced that only three of its 74 largest cities (two of them on islands) met the countries own air quality standards (Hornby (B), 2014). The country’s environmental protection law, dating back to 1989 was amended by the legislative committee in April 2014 and this led to a removal of the cap on fines on polluters. Also, individuals should be able to take legal action in the courts to gain damages. In theory this will lead to a situation where simply accepting the fine for polluting should not be an alternative to remedying an environmental problem. In reality of course, there needs to be adequate enforcement of the regulations and the fines should be set at the appropriate level.

It is also the case that control from the centre is not adequate to make the public sector comply with environmental legislation. For example, in the early part of the millennium the central authorities ordered a number of big cities to build water treatment facilities to handle the growing problem of untreated sewage pouring into China’s waterways. When these facilities were inspected by the central government the vast majority of the facilities had been built on time and to the right

specifications. But one year after they were completed only about half of the plants had actually been turned on, perhaps because constructing the plants was a profitable activity, but actually running them was a cost (Anderlini, 2013).

The aim of the 12th Five Year Plan (FYP) covering the period 2012-15 adopted by the Chinese government in March 2011 to reduce fossil energy consumption, promote low-carbon energy sources, and restructure China's economy this included:

- A 16 percent reduction in energy intensity (energy consumption per unit of GDP);
- Increasing non-fossil energy to 11.4 percent of total energy use; and
- A 17 percent reduction in carbon intensity (carbon emissions per unit of GDP) (Lewis, 2011).

It also had as one of its goals the gradual establishment of carbon trading. The 12th FYP establishes the goal of "gradually establishing a carbon trade market," but does not elaborate. In March of 2013, Shanxi Province (This is the main area of coal- producing, where is heavily polluted) launched a programme to support the sulphur dioxide emissions trading and to improve the air quality of Shanxi. This particular programme, as a sub-project of the EU-China Environmental Governance, mainly led by the Norwegian Institute for Air Research, and cooperated by the following three parties: Shanxi provincial emissions trading centre, the provincial Environmental Information Centre, Czestochowa University of Technology. The project aims to draw the experience of EU environmental policy and governance, to further promote the province's environmental governance, reduce the environmental damage caused by mismanagement to society. Initiatives such as European Union Emission Trading Scheme (ETS) have been suggested as a way forward to deal with some of the most pressing air pollution issues but its operation within the EU has been highly problematic and is really nothing more than a second best option to an EU wide carbon tax (Barnes, 2013). However, all this was to be achieved with a GDP growth rate of at least 7% per annum.

The National Development and Reform Commission of The People's Republic of China set out some of the strategic priorities in its combat climate change (National Development and Reform Commission, 2013). Some of the suggested strategies were more achievable in the medium term than others. One of the major difficulties is that the structure of Chinese industry is such that it is difficult to envisage structural change can take place without a commitment to radical action. The high cost of energy will ensure that industry takes more careful note of its costs, especially when it is more difficult to offset these cost against cheap labour. It is also implied that new producers in high energy using industries will be discouraged by higher entry costs, but it will almost certainly be the case that some newer industrialising countries will be more willing to accept the dirty industries. Whatever is the case, to achieve a rebalancing of the industrial structure implies a combination of market forces, plus a highly directive industrial policy. Some of the other priorities mentioned are savings in energy by retiring inefficient capacity and the optimal use of resources. However, the fact that 68% of primary energy comes from coal, does mean that the potential for significant improvements is limited by coal technology and the availability of alternative cleaner fuels (Can Wang Jie Lin Wenjia Cai Hua Liao, 2014). Also with the demand from the population for higher living standards, there will be more demand for energy, even if equipment is more energy efficient, for example to provide air-conditioning and to run cars.

Coal in particular represents a major challenge, with China consuming 25% of the world's demand for coal, but the present indications are that it is unlikely that anything much more than a plateauing of demand for it can be achieved in China. So the hope is that coal usage will amount to only 65% of primary energy production, but there is a hope that less coal will be used in power generation and steel production in the provinces surrounding Beijing. Also, due to the anti-pollution drive coal's share of new generating capacity has dropped to 40% from 75% in the 2010-2012 period (Pilita Clark, 2013). The costs for solar and wind energy have been falling and making them more competitive relative to coal (Neil Hume, 2014). But China seems to have a more limited potential to extract shale gas, because it is deeper and further away from the market, however the consumption of gas is expected to increase significantly because of the need to introduce pollution abatement measures associated with huge problem of urban smog. The government anticipates the share of natural gas to grow from 4 per cent in 2014 to 8 per cent by the end of 2015, and 10 per cent by 2020 (Raval, 2014).

Enforcement of Environmental Rules

A separate five year environmental plan, devised by the Ministry of Environmental Protection, came into place as part of the 9th FYP (McElwee, 2011). The 10th FYP (2001-2005) did set some environmental targets, but they were relatively modest. The 11th FYP (2011-2015) had set targets for more efficient use of energy and better use of water and reduced pollution.

The problem that China faces is that, as the state becomes ever more complex, regulations are routinely circumvented, and now there is a need to change direction completely as the issue of particularly poor air quality has impacted on almost every citizen's life. The 11th FYP made the point that;

“There is no breakthrough in some in-depth environmental issues that should have been addressed during the ‘10th Five-Year Plan’ period. There is no fundamental change in the inappropriate industrial structure and extensive economic growth mode. There are also such problems as environmental protection lagging behind economic growth, poor or inflexible mechanism, insufficient input and capacity. The phenomena of no strict observation of laws, little punishment to lawbreakers, poor law enforcement and supervision are still very common.” (Administration, 2006). The National Eleventh Five-year Plan for Environmental Protection (2006-2010)

Attempts were made to further improve the environmental situation were announced in late 2013, but were really just emphasising that more needed to be done. The statement issued at the end of the third plenary session of the 18th Communist party of China's Central Committee stated that:

“To construct an ecological civilisation we must establish systematic and integrated ecological civilisation, institutions and systems, and use institutions to protect the ecology and environment,” (Anderlini, 2013)

There is a huge contrast between having excellent environmental legislation and ghastly pollution problems. Having very tough environmental standards does not however mean that they are

actually enforced. It has been argued that the Ministry of Environmental Protection is the weakest link, because despite its responsibility for enforcing the central government's air, water soil and other environmental regulations, it faces significant manpower constraints, a limited mandate and very limited powers to punish those who fail to comply with the standards. This has meant that many of the environmental laws have remained unenforceable. Even where fines have been imposed, they typically have been less than the economic gains from non-compliance (Stratfor, 2014). However, public concern after a period where air pollution has been particularly bad, it has helped the Ministry of Environmental Protection overcome some of the pressure from industrialists who have resisted attempts to assuage the rising tide of pollution. Clearly the public are very aware of the problems and so their concerns needed to be assuaged from time to time, so for example fireworks were seen as partly a culprit. In January 2014, attempts were made to restrict the use of fireworks used to celebrate the Spring Festival, which suggests a certain amount of desperation over the issue (Kiaman, 2014).

Despite all the general concern, environmental activism tends to be limited, in part because of attempts to control the activities of individuals who might engage in it. Examples of this may well be the case of Xu Zhiyong, jailed in January 2014 for "gathering a crowd to disrupt public order" (Mitchell, 2014), and Chen Yongzhou, a journalist who was made to confess on China Central Television for defaming a partly state owned firm (BBC, 2013). The problem here is that hostility in the media is generally unwelcome and controlled either by censorship of the official variety or self-censorship.

EU – China Environmental Collaboration

The EU sees itself as an environmental leader in the world of global environmental politics (Vogler JF, 2011). As such environmental issues are part of its foreign policy mission. In terms of formal environmental dialogue between the EU and China the following main channels exist:

- Environment Policy Dialogue (EPD) at ministerial level (since 2003): the EPD meets regularly, alternating between Brussels and China.
- Bilateral Cooperation Mechanism on Forests (BCM) at director level (since 2009) with the Chinese State Forestry Administration (SFA)
- DG Climate Action has an ongoing dialogue with the PRC, the Climate Change Partnership

In addition to these there are Annual Summits: where the European External Action Service (EEAS) takes the lead. The 2014 Summit in Brussels 31st March 2014 to 1st April 2014 was attended by President Xi Jinping and led to joint support for strategies to lower the level of greenhouse gasses in the atmosphere (EEAS, 2014)

The EU-China Environmental Governance Programme (2011-2015) (EPG) is a partnership with the EU and the Chinese Ministry of Environmental Protection which has the aim of contributing to the strengthening of environmental governance in China. This is to be done through enhanced administration, public access to information, public participation, access to justice and corporate responsibility in the environmental field.

The EU-China Environmental Sustainability Programme (ESP) was launched in September 2012. The project aimed to support China's efforts to meet the environmental and climate change targets defined in the 12th Five Year Development Plan. The specific objectives focused on the achievement of environmental sustainability through improved water quality and the prevention and control of heavy metal pollution, the implementation of sustainable solid waste management and policy integration and environmental information disclosure. € 10 million was set aside to support the project meant to assist the adoption of best practice. Clearly this represents not much more than a token designed to enhance dialogue. "Better water ecological environment in Tianjin Binhai New Area with less pollution discharge to the rivers and Bohai Sea (ESP-Tianjin)" is one of the projects in the EU-China Environmental Sustainability Programme (ESP, 2013).

The China-Europe Water Platform (CEWP). The EU and China agreed at the 6th World Water Forum in Marseille (March 2012) to establish the Water Platform with the support of the EU's Water Initiative. The platform aims to achieve an integrated approach to water management in China. The CEWP is a political initiative and a partnership for promoting policy dialogue on water sector reforms, encouraging capacity-building, technical and business cooperation (CEWP, 2012).

HED: EU-China High Level Economic and Trade Dialogue Mechanism is a high level meeting for discussing economic, trade and related matters.

Whilst all these initiatives are worthy in themselves, it is the area of environmental information and participation that the EU has most to offer, as a demonstration of what might be done to tackle China's environmental problems. The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters known as the Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment (UNECE, 1998), which entered into force in 2001. It provides for the right to be able to access environmental information, the right to be able to participate in environmental decision making and the right to be able to challenge public decisions and ask for a review. In particular authorities need to: "...recognise that the public needs to be aware of the procedures for participation in environmental decision-making, have free access to them and know how to use them". Article 4 requires that public authorities, in response to a request for environmental information, make such information available to the public as soon as possible, preferably in the form requested" The requirements of this convention have been incorporated into EU law.

The benefits of the Aarhus Convention's mechanism are that, although information can be safeguarded from inappropriate use, the general public and most specifically the press can ensure that incidents of damaging environmental practice can be brought to light, along with an understanding of their consequences. Whilst this is an attempt to improve environmental decision making in Europe, the principles could well be applied to China and make a significant contribution to good environmental governance.

Conclusion

There is no doubt that concerns over the extent of the environmental crisis facing the government of the PRC has worsened, in part because of the deterioration of the physical environment, especially with respect to the air quality in major cities, but also because, this is a crisis which impact upon all in Chinese society. Both the rich and the poor have to live with the impacts, which mean that despite growing material wealth, all face a diminution in the quality of their lives.

There are many things which China can do to improve the quality of its physical environment, but one of the most important contributions that the EU can make is showing how best to inform the general public by involving the media in a responsible way. This can be done by the creation of an information system, which at the peak level would be the European Environment Agency, and at all levels complying with the standards which were laid out in Europe by the 1998 Aarhus Convention. The gains for the EU come in the form of further enhancing its reputation as a leading global environmental actor. It also means that the environmental gains made by the EU will not be crowded out by an even bigger polluter. For China the gains would be that vested interests will be exposed and real progress can be made in addressing the enormous problem of environmental compliance. Both sides of the cooperation will see significant benefits from cooperation on environmental issues: In addition it is possible to observe that:

- It doesn't matter what the regulatory structures look like unless are enforced
- Enforcement requires being prepared to challenge vested interests
- Because of the size and complexity of the People's Republic there needs to be constant exposure of environmental wrong doing by the media, which is very difficult to achieve when criticism of what is happening within the state, is taken as criticism of the state.
- Political stability is an important a goal but media reporting of environmental misdeeds does not need to undermine this.

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