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Brigid Gavin

China's Growing Conflict with the WTO

The Case of Export Restrictions on Rare Earth Resources

China is the leading exporter of rare earths, elements which are crucial to the development of high-tech products and new green technologies. In recent years, however, China has begun imposing export restraints on these elements in order to benefit its domestic economic development. This reduces global supply and thus artificially leads to higher prices for importing countries. The EU, the US and Japan have launched a formal complaint in the WTO against China's export restrictions. China claims that these restrictions are aimed at environmental protection. This paper examines China's rare earth policy and its compliance with WTO rules.

China's membership in the World Trade Organization (WTO) has contributed greatly to its economic development. Since its accession in 2001, China has been transformed from an emerging economy into a global economic powerhouse. China has become the world's largest exporting nation and is expected to become the world's largest national economy in the next five to ten years. However, China faces important new challenges in the WTO, and it is now up to China to take the next necessary steps.¹

China's lack of compliance with WTO rules has caused increasing concern in recent years, in particular its export restrictions on raw materials. China exports a wide range of raw materials, and it has become a leading global producer of many "strategic" raw materials which are essential inputs for high technology industries. The high concentration of many of these raw materials in China creates a situation of dependence for global manufacturers outside of China.²

The European Union is highly dependent on imports of strategic raw materials. These resources are crucially important for the development of new green technologies that are vital

to boosting energy sufficiency and to reducing greenhouse gas emissions. The Commission has stated that the EU will not succeed in shifting towards sustainable production and environmentally friendly products to meet its Agenda 2020 goal without such high-tech metals.³ The European Commission has sought solutions to these problems through dialogue with China, but this has not brought satisfactory results.⁴

Rare earth elements, which consist of 17 different chemical elements, are among the most important strategic raw materials. They are critical inputs for the manufacture of high technology products such as smartphones, laptop computers and flat screen panels. In particular, they are critically important to the new green technologies – wind turbines and electric vehicles – which are projected to be the double-digit growth industries of the future. Although used in only small quantities, they are essential for the production of these goods, and there are no available substitutes in the short term.

It currently supplies 97 per cent of global demand for rare earth metals and produces 60 per cent of rare earth manufactured products.⁵ According to US sources, China ac-

1 See A. Pangratis: EU Statement to the World Trade Organisation on Fourth Trade Policy Review of China, Geneva, 12-14 June, 2012.

2 An OECD study has compiled a list of 20 strategic raw materials which are considered to be crucially important for global manufacturers. See J. Korinek, J. Kim: Export Restrictions on Strategic Raw Materials and Their Impact on Trade and Global Supply, in: The Economic Impact of Export Restrictions on Raw Materials, OECD Trade Policy Studies, Paris 2010, pp. 103-130.

3 European Commission: The raw materials initiative – meeting our critical needs for growth and jobs in Europe, Communication from the Commission to the European Parliament and the Council, Brussels 2008, COM(2008) 699 final.

4 Speech by A. Tajani, Vice-President of the European Commission responsible for Industry and Entrepreneurship: How to ensure a secure supply of raw materials in the global economy, Bundestag Berlin, 25 April 2012, available at http://europa.eu/rapid/press-release_SPEECH-12-304_en.htm.

5 N. Jepson: A 21st Century Scramble: South Africa, China and the Rare Earth Metals Industry, Stellenbosch University Centre for Chinese Studies 2012, p. 8.

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counts for 36.5 per cent of global rare earth reserves, although China contests this, claiming it only has 23 per cent of the world's total.⁶ Regardless, China's reserves are indisputably finite. The Chinese government has, therefore, stated its commitment to use these reserves for the prime benefit of China's own economic development. As a means towards achieving this goal, China has been imposing ever more restrictive export restraints on a number of rare earths and other strategic metals. When it drastically cut its export quotas by 40 per cent in 2010, it triggered fears of supply shortages in importing countries which are dependent on supplies from China. The continuing restrictions are undermining the international market system's confidence in China as a reliable provider of raw materials for global supply chains.

In 2009 the EU, the United States and Mexico launched a first formal complaint in the WTO against China's export restrictions on nine raw materials.⁷ The WTO Dispute Settlement Body ruled against China in its July 2011 judgement. Following an appeal by China, the WTO Appellate Body confirmed the judgement in January 2012. Despite this clear ruling by the WTO, China has made no attempt to remove its other export restrictions. This left no choice to the EU but to challenge China's export regime again to ensure fair access for European businesses to these materials.⁸

The second formal complaint in the WTO has brought together an unprecedented alliance between the EU, Japan and the US against China's export restrictions on rare earths and two other strategic raw materials, tungsten and molybdenum. The issues at stake in the rare earths complaint are quite similar to those of the first case on raw materials. However, China has strengthened its defences by promulgating a number of new legislative measures over the past couple of years which aim to close the loopholes that were apparent in the first case. In June 2012 the State Council – China's highest administrative authority – published its first official White Paper on the rare earths industry in which it justifies its export restrictions and vigorously defends itself against the WTO.⁹

The objective of this paper is to present an analytical survey of the current state of China's rare earth regime and to assess its compatibility with WTO rules.

6 United States Geological Survey: Mineral commodity summaries 2011; and Xinhuanet: U.S. calculations of China's rare earth reserves inaccurate: official, 20 June 2012, available at http://news.xinhuanet.com/english/china/2012-06/20/c_131665381.htm.

7 The raw materials in question were bauxite, coke, fluorspar, magnesium, manganese, silicon carbide, silicon metal, yellow phosphorus and zinc.

8 Statement by K. De Gucht, European Commissioner for Trade, available at www.eubusiness.com.

9 State Council of China: Situation and Policies of China's Rare Earth Industry, Beijing, 20 June 2012.

China's rise to dominance and the global reaction

Over the past two decades, China has risen to a position of dominance and currently maintains a virtual monopoly of production – increasing its share of total global production from 27 per cent in 1990 to 97 per cent in 2012. China is now using the leverage from its dominance of the upstream industry to expand its dominance to the downstream industry.¹⁰ How has this global disequilibrium for such important strategic resources come about, and what are the prospects for the future of the industry?

The production of rare earth metals has grown progressively in step with the development of modern technologies.¹¹ They were first mined commercially at the end of the 19th century in Sweden and used for production in the incandescent lamp mantle industry. The next new application for rare earths came with the discovery of nuclear power, and South Africa became a major supplier to the nascent industry in the United Kingdom in the 1940s and 1950s. When it was discovered a decade later that rare earths made colour television possible, a major expansion of new mining activity took place in California with the opening of the Mountain Pass mine in 1965.

The continuous dynamism of the consumer electronics industry since then has led to a whole slew of new applications for rare earths. Not surprisingly, Japan has become the largest consumer of rare earth elements and imports over half of all Chinese exports. Rare earths are also of major importance for the defence industries, especially in the United States. And rare earths are of critical importance for the new green technologies that are currently being developed in Europe and elsewhere.

As China's economic modernisation took off in the 1980s, the Chinese government was quick to recognise the vast potential of their resources. Deng Xiaoping reportedly predicted that rare earths would do for China what oil did for Saudi Arabia. The rare earth industry was identified as a strategic sector for China's economic development that would be carefully protected and fostered under state control and planning. All foreign investment was prohibited in the mining of rare earths.

China's production of rare earth elements grew very rapidly throughout the 1990s, showing the now familiar characteristics of China's growth model. The process was marked by overproduction and selling at extremely low and unprofitable

10 The upstream industry includes the mining of rare earth elements, while the downstream industry consists of the various stages of processing the primary commodities, leading to the final stage of manufactured finished products.

11 This section draws from N. Jepson, op. cit.

Table 1
Selected projects for rare earths outside of China

Country	Project	Company	Total rare earths (tonnes)	Projected production start
USA	Mountain Pass	Molycorp	2,072,037	2013
South Africa	Steenkrampskraal	GWMG / Ganzou Qiandong Rare Earth	29,400	2013
Canada	Montviel	Geomega Resources	3,645,887	
Australia	Dubbo	Alkane Resources	651,480	2013
Australia	Mount Weld	Lynas	1,413,646	2013
Australia	Nolans Bore	Arafura Resources	848,000	2014
South Africa	Zandskopsdrift	Frontier Rare Earths / Kores	945,863	2015-2016
Canada	Thor Lake	Avalon Rare Metals	4,297,807	2015-2016
Canada	Strange Lake	Quest Rare Metals	2,098,248	2016
Greenland	Kvanefjeld	Greenland Minerals and Energy	6,328,700	2016
Sweden	Nora Karr	Tasman Metals	326,700	Unknown
Kyrgyzstan	Kutesay II	Stans Energy	46,608	Unknown
USA	Bokan	Ucore Rare Metals	27,321	Unknown
Canada	Hoidas Lake	Great Western Minerals Group	68,395	Unknown
Brazil	Salobo	Vale SA	Unknown	Unknown

Source: N. Jepson: A 21st Century Scramble: South Africa, China and the Rare Earth Metals Industry, Stellenbosch University Centre for Chinese Studies, 2012.

prices on international markets, which was made possible by cheap land and resources, lax environmental standards, and low labour costs. In this way, the Chinese development model was able to undercut the American competition as environmental standards grew stricter in California and the authorities started to refuse mining licences. In 2002 Mountain Pass – the largest mine in the world, extracting more than 20,000 tonnes a day – was closed down. Since then it has lain dormant, and leadership of the industry has passed to China.

There was no major impact from China's dominance as long as its supply of rare earth elements exceeded international demand. That was the case up until 2009, but China drasti-

cally reduced its exports by 40 per cent in 2010 compared to the previous year. It has loosened up its export quotas a little since then, but they still remain lower than in 2009. Many foreign firms have been forced to move their operations to China, because there is a two-tier price system in which the price outside of China is much higher than inside. Hitachi, for example, which is the world's largest producer of magnets, plans to move 20 per cent of its production to China.

Demand for rare earths is projected to grow at annual average rates of 8-11 per cent in coming years, but demand for those rare earths critical to green technology will be even higher.¹² So how will the supply deficits be dealt with? The most important message from the experience of 2010 is that the industrialised countries must manage their resources better.¹³ In fact, there is no physical scarcity or problems with geological access to strategic raw materials. The current situation is an artificial shortage that has been created by trade protectionist policies. Thus, 2010 was a wake-up call to importing countries to accelerate their efforts to provide alternative sources of rare earths. And, indeed, this is already happening. How soon will rare earth surpluses be achieved? It depends on the speed with which new mines can be brought into production. According to projections for future supply and demand, all rare earths are expected to be in surplus by 2017 and some of them well before that date.¹⁴

First contenders are the Mountain Pass mine in California and the South African Steenkampskraal mine, both of which are currently being reconstructed for production. In addition to these established projects, junior mining companies are exploring new projects in other parts of the world. Some of those projects are predicted to come on stream already in 2013 or soon after so that some of the rare earth elements may soon move into surplus, as indicated in Table 1.

For non-Chinese rare earth investment projects, the major risk is that China will reduce its export taxes and abolish its export quotas, which will impact on the rare earth producers outside of China. World prices are now typically 20 per cent higher than Chinese domestic prices. But a sharp drop in world prices, due to changes in Chinese policies, would make investments outside of China non-competitive. Non-Chinese producers have to compete against China with higher capital costs and higher environmental standards.¹⁵

12 G. Hatch: Critical Rare Earths: Global Supply and Demand Projections and the Leading Contenders for New Sources of Supply, cited in N. Jepson, *op. cit.*, p. 14.

13 P. Andrews-Speed: The Rare Earths Case against China at the WTO: Who Wins?, 30 March 2012, available at www.transatlanticacademy.org.

14 N. Jepson, *op. cit.*

15 J. Korinek, K. Kim, *op. cit.*

Economic effects of export restrictions

Export restrictions include a wide variety of laws, regulations or taxes imposed by governments with the aim of reducing a country's exports.¹⁶ Among the most commonly used are export duties and export quotas. At first sight, it appears counter-intuitive that a country like China – so committed to export-led growth – would restrict its exports. But economic analysis shows that a large country in the global economy, such as China, can effectively gain advantages from export restrictions – at the expense of importing countries. The overall result is, nevertheless, a reduction in global economic welfare.¹⁷

An export duty drives a wedge between prices on domestic and international markets. It increases the price of China's exports, which in turn increases global prices. Export quotas reduce global supply, which also increases prices for the importing countries. These effects are all the greater due to the size of the Chinese economy. They create serious disadvantages for downstream producers in the importing countries. Faced with this situation in a competitive economy, importers would switch to alternative suppliers. But that is not possible for rare earths, because there are no alternative suppliers to China and no available substitutes in the short term.

Thus, the main effect is a major increase in world prices. Demand continues to be high, as it is driven by the needs of the industries in the importing countries. Given the size of its economy, China can unilaterally improve its terms of trade because of its ability to influence the world price. The importing countries have to bear the cost by paying higher prices while the exporting country has a welfare gain. In this case, China gains large economic rents. However, there is a net loss for the world.

An export quota is an effective means of diverting supplies of rare earths from the foreign to the domestic market in order to gain advantages for the domestic industry.¹⁸ An export quota effectively lowers the price of raw materials for domestic producers in the upstream industry – which creates an advantage for the downstream industries. It enables

China's downstream producers to produce lower-priced products from the raw materials and thereby to create advantages for Chinese producers when competing with foreign producers. This provides incentives for foreign producers to move their operations and technologies to China, which provides additional advantages to the domestic industry.

However, export quotas penalise the local producers of raw materials, preventing them from exporting freely to higher-priced international markets. This could have a negative effect in the long term, because lower revenues in the mining industry will reduce investment and impair China's ability to exploit its natural comparative advantage. China presently prohibits foreign investment in the primary upstream industry.

To summarise, China's export restrictions reduce global supply and cause rising prices in the global market for importing countries. The economic effects of these restrictions are to disadvantage foreign producers and to divert raw material supplies to domestic markets. This provides cost advantages for domestic producers over their foreign competitors. The result is unfair competition between producers of rare earths in China and in the rest of the world.

Policy objectives of export restrictions

The most frequently stated policy objective of export restrictions is environmental protection and conservation of natural resources. It is well known that the mining of rare earths is an extremely polluting activity. The past two decades of rapid, unregulated development of the industry in China has caused extensive environmental degradation. Against this background, the government now imposes export restrictions with the stated aim of increasing environmental protection and conserving its finite natural resources.

But are trade restrictions the best policy to achieve those objectives? Does the evidence show trade restrictions are successful in achieving the stated goals? The best policy to reduce environmental pollution is to attack the problem as close as possible to the source. In the Chinese rare earth industry, the source of the problem is the divergence between private and social costs. Industries have been allowed to produce for several years without paying for pollution, which has high social costs – for the environmental and health.

This is a case of market failure in the domestic economy which warrants Chinese government intervention in the form of domestic policies, not trade restrictions. A domes-

¹⁶ There is no obligation for countries to notify their export restrictions to the WTO, so there has been a great lack of transparency in this field for many years. The OECD has now filled the gap and has compiled an inventory of measures. See F. van Tongeren: The impact of export restrictions on raw materials on trade and global supply, in: Globalisation, Comparative Advantage and the Changing Dynamics of Trade, OECD, Paris 2011.

¹⁷ A. Bouët, D. Laborde Debucquet: Economics of Export Taxation in a Context of Food Crisis: A Theoretical and CGE Approach Contribution, International Food Policy Research Institute Discussion Paper 00994, June 2010.

¹⁸ F. van Tongeren, op. cit.

tic tax on the polluting industry would act as an incentive for the industry to reduce pollution to a more optimal level. Production taxes are the more cost effective way of increasing environmental protection.¹⁹ They can be applied in a non-discriminatory manner, and the revenue raised can be used for finding environmentally cleaner production methods.

There is much evidence to show that trade-restricting measures are not successful in achieving environmental protection goals. In practice, export restrictions stimulate domestic production for the reasons given above, thus leading to increased pollution and the increased use of natural resources. This runs counter to the stated policy objectives of reducing pollution and conserving natural resources. Furthermore, the gap between foreign and domestic prices frequently encourages illegal activities to increase exports, which would force the government to invest resources to limit this.

The policy objective of promoting downstream industries for economic development is pursued when foreign demand raises the price of the raw materials, making them too high for the domestic downstream industry. In this case, the government fears that the competitiveness of the home industry will be stunted, putting its economic development in jeopardy. Even more important is the motivation of governments to use export restrictions to generate higher value-added products in the downstream industry to diversify its economy.

But this strategy may turn out to be misguided. Success in developing downstream industries depends not only on the availability of cheap raw materials. In fact, the further the industry moves down the processing line, the less important is the link between raw materials and product output. To achieve high value-added output in processed products requires sophisticated technological knowledge, highly skilled labour and good infrastructure. The raw material represents a diminishing part of the cost, and a policy which promotes comparatively low domestic mineral prices may not be very effective in advancing a country's comparative advantage.

China's growing conflict with the WTO

China's accession to the WTO in 2001 was part of a broader strategy of comprehensive reform of its economy upon which it had already embarked. Joining the world trade club required China to move to a market economy, which implied the need to reduce the scope of state intervention in the economy, including the role of state-owned enterprises. It also meant that China's trade-distorting industrial policies would have to be gradually eliminated.

19 B. Gavin: Trade and Environment, in: *The European Union and Globalisation: Towards Global Democratic Governance*, Cheltenham 2001, Edward Elgar, pp. 153-193.

China's terms of accession to the WTO were carefully negotiated over a period of 15 years. In the final report of the Working Party on its accession, China assured its trading partners that it would respect its commitments by revising its existing laws and enacting new ones fully in compliance with WTO rules. In response to concerns expressed about potential divergences between central and provincial governments, Beijing stated that provincial governments had no autonomous authority over trade-related measures and that the central government would ensure that provincial governments' regulations conformed to China's WTO obligations. These assurances were part of China's formal commitments.²⁰

In joining the WTO, the Chinese government voluntarily accepted its commitments on export duties as contained in the Protocol of Accession and the rules governing export quotas which are embodied in the General Agreement on Tariffs and Trade (GATT) of 1994. The rules include:

- A general prohibition on the use of quantitative measures, such as quotas, for the purpose of export restrictions in Article XI.1. Under certain conditions, exceptions to the general rule are permitted under Article XI.2.
- A general prohibition of export duties except under the conditions stipulated in Article VIII.
- Article X, which says that measures must be applied in a uniform, impartial and reasonable manner.
- General exceptions to the prohibition on export restrictions are available for environmental purposes, for example the "protection of animal, human and plant life and health" and the "conservation of natural exhaustible resources" in Article XX.

The first complaint on raw materials: 2009

What led to the first formal complaint in 2009 was China's export restriction on a group of nine raw materials that dated back to 1994. Those measures were challenged by the EU, the United States and Mexico, resulting in the Appellate Body's final judgement in January 2012, which stated that the Chinese measures were in violation of WTO rules. The major findings of the Appellate Body made some important clarifications concerning the application of the WTO rules which are directly relevant to the rare earths case.²¹

20 D.C. Clarke: China's Legal System and the WTO: Prospects for Compliance, in: *George Washington University Global Law Review*, Vol. 2, No. 97, 2003, pp. 97-118.

21 For a detailed legal analysis, see B. Karapinar: Defining the Legal Boundaries of Export Restrictions: A Case Law Analysis, in: *Journal of International Economic Law*, Vol. 15, No. 2, 2012, pp. 443-479.

First, it clarified the relationship between China's Accession Protocol and the GATT. China argued that it had accepted "WTO-plus" obligations that were more stringent than those of other countries at the time of its accession. Because of this, China was justified in taking recourse to the general exception contained in Article XX.²² But the Appellate Body concluded that China could not invoke GATT exceptions with respect to its accession commitments, which state that it has the right to apply export duties on only 84 products listed in an Annex to the Protocol. Because the products under complaint were not on that list, China could not have recourse to Article XX for these raw materials.

The issue of sovereignty over natural resources was also an important question. China argued that Article XX allowed it to restrict exports to conserve its natural resources which are finite and non-renewable, because it had sovereignty over its natural resources. To support its claim, China referred to public international law, which recognised its right to exercise its sovereignty by conserving its natural resources. The Appellate Body took into consideration sources of international law and accepted that principles of sovereignty should be recognised. But it finally concluded that such arguments did not allow China to derogate from its WTO commitments. In joining the WTO, China had agreed to exercise its sovereignty to regulate trade and natural resources in a manner consistent with its WTO obligations.²³

The relationship between export restrictions and economic development was another issue at stake. China invoked Part IV of the GATT, which deals with economic development, saying the measures taken were for the purpose of diversifying its economy. The response of the Appellate Body was categorical: no right to use trade restrictions for purposes of economic development exists in GATT rules.²⁴

Concerning the general prohibition on export quotas contained in Article XI.1, the Appellate Body found that the disputed Chinese measures were not "temporary measures" taken to relieve a "critical shortage", which could be used in the case of exports of food, for example. Therefore, they could not be justified under the special conditions stated in Article XI.2 on the grounds that they were "temporarily" imposed to relieve a "critical shortage" of raw materials that were "essential" for the country.

22 J.W. Qin: The Predicament of China's 'WTO-Plus' Obligation to Eliminate Export Duties: A Commentary on the China – Raw Materials Case, in: *Chinese Journal of International Law*, Vol. 11, No. 2, 2012, pp. 1-10.

23 S.E. Rolland: China-Raw Materials: WTO Rules on Chinese Natural Resources Export Dispute, in: *American Association of International Law Insights*, Vol. 16, No. 21, 2012, pp. 1-5.

24 Part IV of the GATT was introduced in the 1960s with the purpose of helping developing countries to increase their exports and to provide better market access for their exports in industrialised countries.

With regard to the general exception for environmental protection and conservation of natural resources contained in Article XX, the introductory paragraph says that any restrictive measures must "not constitute a means of arbitrary or unjustifiable discrimination between countries" or "a disguised restriction on international trade". This was especially important as China was obliged to convince the Appellate Body why it had not used less trade-restricting measures – such as domestic taxes or production quotas – that were freely available.

With regard to the specific provisions of Article XX, which refer to the need to "protect human, animal or plant life or health" or to the "conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production and consumption", the Appellate Body found that China's measures did not amount to a comprehensive framework to fulfil the stated aim of environmental protection. The evidence showed that export restrictions had actually increased domestic consumption of natural resources due to lower domestic prices which stimulated increased domestic production. So the disputed export restrictions had not led to conservation of natural resources or reduced pollution.

The second complaint on export restrictions: 2012

In July 2012 the EU and the US, joined by Japan, launched a second round of litigation against China's export restrictions on the strategically important materials of rare earths, tungsten and molybdenum. The complainants argued that these restrictions violate China's WTO commitments and significantly distort global markets to the disadvantage of companies in importing countries. Therefore, there was no other choice but to solve the problem through litigation.²⁵

Export quotas were first imposed in 1999 for the economic objective of raising international prices for Chinese exporters.²⁶ But from 2006 on, government policy became increasingly restrictive. 2010 marked a major turning point when China drastically cut the quotas by 40 per cent compared to 2009, leading to sharp price increases in global markets. China's annual quota continues to be lower than the 2009 level, as shown in Table 2. At the same time, China has imposed progressively higher export duties on rare earths, increasing them from 10 per cent to 25 per cent. Combined with this, VAT refunds on a number of rare earth products have been eliminated. The overall result of this is that non-Chinese manufacturing industries are obliged to pay 31 per

25 Statement by European Commissioner for Trade, K. De Gucht, on 27 June 2012, available at www.reuters.com.

26 The OECD has estimated that prices increased by US\$120 in 2000 compared to 1999. See J. Korinek, K. Kim, op. cit., p. 126.

Table 2
China's export restrictions

Year	Export quotas (in tonnes)	Export taxes (in %)
1999	First introduced	
2004	65,609	
2005	65,609	
2006	61,821	10
2007	59,643	
2008	56,939	15 / 20 / 25
2009	50,145	
2010	30,258	
2011	30,246	
2012	30,996	
2013	30,999	

Sources: G. Hatch: The Second Round of Chinese Rare Earth Export-Quota Allocations for 2013, 6 July 2013, available at www.techmetalsresearch.com; and J. Korinek, J. Kim: Export Restrictions on Strategic Raw Materials and Their Impact on Trade and Global Supply, in: *The Economic Impact of Export Restrictions on Raw Materials*, OECD Trade Policy Studies, Paris 2010, pp. 103-130.

cent more for rare earth materials than their Chinese counterparts, according to OECD estimates.²⁷

China is expected to defend its export policies along the lines argued in the State Council's White Paper of 2012. The current rare earth regime will be presented as a comprehensive framework of regulation which now links together all the various policy aspects of domestic production and exports, with new standards for environmental protection and conservation of natural resources. This will show how the rare earth industry has become increasingly regulated with extensive interconnections among a number of important government ministries that are actively involved in the process. At the time of writing, we do not have full information on China's defence, as the WTO case is still ongoing. However, available information on the evolving rare earth regime in recent years allows for analysis and some tentative conclusions.

The White Paper builds on the State Council's Opinions, published in 2011, which are, in effect, a high-level policy plan to promote multiple goals for the industry.²⁸ Government policy aims to consolidate the industry by closing down many small companies or merging them into larger enterprises; to curb illegal mining and clamp down on rampant smuggling, which is said to account for 25 per cent of total exports; to promote clean production by reducing the severe environmental

damage that has been caused by the industry in the past; to improve health and safety standards; and to engage in ecological restoration and environmental protection. In short, the Opinions indicate a dual strategy for industrial development and environmental protection; they combine a conglomerate strategy for restructuring the industry and tighter control over exports with the implementation of new environmental standards.

Deconstruction of China's evolving rare earth regime on the basis of its main legal instruments can contribute to clarification of the new policy orientation.²⁹ The primary legal instrument governing export restrictions is the Foreign Trade Law of 1994, which allows for export restrictions to achieve certain policy goals including, *inter alia*, environmental protection, conservation of natural resources and development of a particular domestic industry. The law also states that enterprises found to be in violation of export restriction rules will be subject to administrative fines or even criminal sanctions.

This law has been implemented by a State Council regulation which came into effect in 2002, at the time of China's accession to the WTO. On a day-to-day basis, it is the Ministry of Commerce (MOFCOM) which is the most important government authority charged with trade regulation. MOFCOM, acting in conjunction with the Customs Authority, has responsibility to establish, adjust and publish the list of goods subject to export restrictions.

Since 2008, MOFCOM has introduced extensive new measures to tighten the administration of export quotas with the introduction of two new policy instruments: Measures for the Administration of Licences in 2008 and, most recently, a new Export Licensing Catalogue for the administration of exports in 2012. Rare earths are listed as one of the 49 products covered by the 2012 catalogue, but criteria for selection of the products are unclear. Application for export quota licenses must first be made to provincial commerce ministries and after a preliminary review recommendations will be sent to MOFCOM. State owned enterprises, however, can apply directly to MOFCOM. The purpose of these measures is obviously to establish more effective control over exporting firms.

Prior to the State Council's Opinions in 2011, the rare earth industry was characterised by an almost complete absence of environmental regulation. Since then, however, the Ministry of Environmental Protection has introduced environmental standards for air and water pollution in the industry. It will, furthermore, carry out monitoring and supervision of

²⁷ J. Korinek, J. Kim, *op. cit.*, p. 119.

²⁸ State Council of China: *Several Opinions on Promoting Sustained and Healthy Development of the Rare Earth Industry*, Beijing 2011.

²⁹ For a comprehensive analysis of China's domestic legislation, see H. W. Liu, P. Lyfoung, J. Maughan: *WTO Rules, Export Quotas and Sustainable Development: the Case of China Rare Earths*, Trade and Investment Law Clinic Papers, Geneva 2012.

enterprises to ensure enforcement of those standards – in conjunction with MOFCOM. Export quota licences may be refused by MOFCOM to firms who do not meet the required environmental standards and given to other competitors. Here we see a linkage between enforcement of environmental standards and allocation of export quota licences which suggests that environmental protection is not an end in itself but rather a means to support the more rigorous administration of export restrictions.

China's conservation of its natural rare earth resources has largely resided with the Ministry of Land and Resources – a traditionally important actor in overseeing the mining industry. In 2008, it published a Circular on the Implementation of the National Development Plan, which aims to limit total extraction of rare earth resources for conservation purposes. This was followed in 2009 by new regulations which set annual limits on domestic production and established domestic production quotas which are backed up by steps to enforce them.

Yet, the evidence shows that China's commitment to conserving rare earth resources is primarily for the benefit of its domestic manufacturing industries in fostering its economic development. This commitment has been repeatedly expressed in official documents since the 1990s and was recently reaffirmed in the Development Plan 2009-2014 for the Rare Earths Industry issued by the Ministry of Industry and Information Technology (MIIT).³⁰ The fact that rare earths have been brought under the purview of MIIT since 2011 reveals the industry's strategic importance in China's strategy for achieving technological leadership. Henceforth, the rare earth industry will be managed in a similar way as other major industrial sectors.³¹

Conclusions

Given that China's defence of its export duties under its Accession Protocol, its defence of export quotas under Article XI and its environmental defence under Article XX have all been rejected by the Appellate Body decision of 2012, what are the prospects for the rare earth case? While no definitive conclusions can be drawn at this point in time, it is, nevertheless, safe to say that the current case on China's export restrictions of rare earths will most probably build upon the first WTO judgement on raw materials with regard to the most important issues.

First, concerning China's export duties and whether they are compatible with its WTO commitments, the Appellate

Body clearly stated in the first case that China's export duties on all raw materials not specifically listed in the Annex to its Protocol of Accession were prohibited. This is unlikely to change in the case of rare earths, which are also not listed in the Annex.

Second, with regard to China's export quotas, the evidence clearly shows that the Chinese government has been actively involved in the application of export quotas on rare earths for more than ten years now. Government regulation, supervision and enforcement of those quotas have been expanded and tightened over recent years. According to high-level government statements, the government envisages keeping these restrictions in place for an indefinite period, which they consider necessary for the appropriate conservation of these depletable resources. Against the background of the Appellate Body's findings in 2012, it would appear unlikely that this policy will pass the test of Article XI in the WTO.

Third, China's environmental arguments, which will constitute the core part of its defence, will rest on the recent introduction of new environmental standards which are subject to monitoring and supervision. While the new measures per se may represent an important new policy development to strengthen environmental protection, the issue at stake in the WTO is more complex. China will have to demonstrate that the new environmental regulations do indeed have environmental protection as their central objective and that they do not serve the purpose of "green protectionism". It will, therefore, have to explain why less trade-restricting measures have not been used for purposes of environmental protection. Measures such as domestic production taxes are available and have been successfully used by Chile, another major exporting country of raw materials.

China will have to produce concrete evidence that its new environmental measures are making a material contribution to environmental protection and the conservation of natural resources in practice. This has not been the case so far, as shown in the first case on raw materials. So, it will not be sufficient for environmental standards to be used in such a way as to provide incentives for enterprises to attain export quota licenses. This appears to be the case from a reading of the new legislation.

To conclude, export restrictions are not the optimal policy instrument to increase environmental protection and conserve depletable natural resources. China would be better served by making use of more cost-effective, non-discriminatory policies, such as production taxes. Export restrictions impose high costs on the industrialised countries, which are the major importers of rare earths, while allowing China to accrue economic rents. The rectification of this situation now lies in the hands of the WTO.

30 J. Korinek, K. Kim, *op. cit.*

31 N. Mancheri: China's White Paper on Rare Earths, in: East Asia Forum, 16 August 2012.