

The timber footprint of the G8 and China

*Making the case for green
procurement by government*

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Executive summary

Illegal logging and the trade in illegal timber and wood-based products is known to occur in more than 70 countries. It is a global issue that involves both developing and developed nations.

Illegal logging occurs when timber is harvested, transported, processed, bought or sold in violation or circumvention of national or sub-national laws. The World Bank estimates that the loss of revenue to governments is US\$5 billion annually, with a further US\$10 billion lost to the economies of producing countries. WWF believes that illegal logging and other forms of forest crime are part of a larger problem that includes poor forest governance and increasing levels of corruption. Poor governance often leads to increased access to, and the unsustainable utilisation of, forests as well as to an increase in activities such as illegal mining, bushmeat hunting, settlement and conversion of land for agriculture. Loss of forest resources directly affects the livelihoods of 90 per cent of the 1.2 billion people in the developing world who live in extreme poverty.

In 1998, the G8 countries (Canada, France, Germany, Japan, Italy, Russia, the UK and the US) formally recognised that “illegal logging robs national and sub-national governments, forest owners and local communities of significant revenues and benefits, damages forest ecosystems, distorts timber markets and forest resource assessments, and acts as a disincentive to sustainable forest management”. A range of actions was agreed upon, including an assessment of their internal measures such as procurement policies, to control illegal logging and the international trade in illegally harvested timber.

This report highlights trade-flows between the countries of the G8 and China, and those countries with known problems of illegal activities in the forest sector. It also examines current public procurement policies of the G8 countries and China, and recommends measures that their governments should take to combat the importation of illegal timber and wood-based products for public procurement. China is included in this analysis due to its significantly increasing consumption of timber and wood-based products in recent years.

An assessment of current public procurement by the countries of the G8 and China. The countries of the G8 and China import - for national consumption or processing prior to re-export - two thirds (approximately 609 million cubic metres Round Wood Equivalent) of the timber, pulp, paper and wooden furniture that is traded globally every year. It is estimated that on average, 18 per cent of this trade is to fulfil government procurement demands, worth approximately US\$23 billion a year. By comparison, less than 1 per cent (approximately nine million cubic metres) of internationally-traded timber is believed to be certified as coming from well-managed forests.

Procurement by the various G8 countries and China impacts upon different regions or countries depending on where their main supplies come from. For instance, the US imports predominantly from Canada, Latin America and East Asia; Japan primarily from North America, Russia and parts of Asia and Oceania; northern EU member states from Europe; southern EU member states from Europe and Africa; and China from Asia, Oceania, Africa and Europe. Many producing countries have one or more of the following in common: high levels of foreign debt, poor governance, high levels of poverty, unsustainable forest

management, and the loss of High Conservation Value Forests. These factors, among others, contribute to illegal and unsustainable trade.

Because the use of chain of custody systems (allowing the flow of timber and wood-based products from the forest floor to the final consumer to be monitored) is not widespread, and because governments do not monitor the source or impact of their timber procurement, it is difficult to directly link their timber procurement to specific cases of illegal logging. However, documentation shows that illegal logging occurs in many countries supplying the G8 and China, so up to a third of the timber and wood-based products procured by their governments may have been sourced or traded in illegally.

Canada

Canada is a major producer of timber and wood-based products. However, it also imports some tropical timber products such as veneers, and furniture from tropical countries where illegal logging is prevalent.

China

The great majority of China's timber imports originate from Indonesia, Malaysia, and Russia. China's imports include illegally logged timber from Russia (50 per cent of all export trade in the Russian Far East is illegal), Burma, Cameroon, Gabon, Indonesia, Liberia, Papua New Guinea and Thailand. Thailand in turn imports illegal timber from neighbouring Burma, Cambodia and Laos for export.

France

The French government imports an estimated US\$2.8 billion of timber and wood products every year. France is the largest European and the second largest global importer of tropical timber from Africa. Its main supplying countries in Africa are Cameroon, Equatorial Guinea, Gabon, Ivory Coast and Liberia - all known to export illegal timber. France also imports wooden furniture from Brazil, where 80 per cent of logging in the Amazon is thought to be illegal.

Germany

The German government is estimated to be the third largest importer (by volume) of timber and wood-based products in the G8 and China. It imports 14 per cent of Russia's exports of pulp and paper (it is estimated that 25 per cent of timber from north-west Russia, where most of this pulp originates, is illegal). It also imports 16 per cent of Ghana's timber exports. In addition, Germany imports from Brazil and Latvia, both of which have documented widespread illegal logging.

Italy

Italy imports more than 10 million cubic metres of timber and wood products. Italy is the world's leading exporter of wooden furniture. Whereas the raw material for a proportion of these exports originates from forests within the EU, more than 10 per cent originates from central Africa. Cameroon supplies 40 per cent of the tropical timber that Italy imports - half of these exports are considered to be illegal.

Japan

Of those governments examined here, Japan is estimated to procure the second-largest amount (by volume) of timber and wood-based products. It is one of the world's principal

importers of timber, with an increasing amount of imported logs coming from the Russian Far East. Japan is the largest importer of wood chips and it also imports substantial quantities of pulp and paper. In addition, it is a major export market for timber and wood products from Indonesia, Malaysia, Papua New Guinea, Russia and Thailand - all countries with documented illegal logging and related trade.

Russian Federation

Russia is a major producing country. Its exports, primarily logs, are mainly due to increased demand from China and Finland - both of which are also significant exporting countries. While the demand from the European market for Russian timber is stable, the countries of the Asia-Pacific region (particularly China, Japan and Korea) demonstrate rapid growth in consumption. Exports to China (about 15 per cent) have grown over the past three years, already reaching levels that were not expected until 2010. Thirty-five per cent of exports in north-west Russia are thought to be illegal, rising to 50 per cent in the Russian Far East. Some 25 per cent of Russia's exports go to EU countries, including the UK which is the fifth-largest EU importer of timber and timber products from Russia.

United Kingdom

The United Kingdom is a major importer of timber and paper and depends on imports for roughly 85 per cent of its consumption. The government procures an estimated US\$2.5 billion of timber and wood products every year. Sawn wood comprises the great majority of the UK's timber imports. Brazil and Indonesia supply about a third of the UK's tropical timber supply, while Malaysia supplies much of the remainder. Fifteen per cent of Brazil's and 13 per cent of Vietnam's wooden furniture exports go to the UK. The UK's tropical timber imports from central Africa derive primarily from Cameroon. Within Europe, 34 per cent of Latvia's timber exports are imported by the UK, and unofficial estimates of illegal logging are much higher than the 2-3 per cent suggested by officials. Ten per cent of Estonia's timber is exported to the UK, 50 per cent of which is considered illegal.

United States

The US government procures at least US\$7 billion of timber and wood products every year, and of the governments examined in this report, it is estimated to procure the largest amount (by volume and value) of timber and wood-based products. Canada supplies the great majority of the US's imports of pulp and paper, and timber (mainly sawn wood, and to a lesser extent fibreboard). China and Canada supply most of the US's increasing imports of wooden furniture. China imports timber to make this furniture from countries that are known to export illegal timber, such as Burma. The US is also a major importer of wooden furniture from Brazil, Indonesia, Malaysia and Thailand. For Malaysia and Thailand, many raw materials are derived illegally from neighbouring countries such as Indonesia, Cambodia and Laos.

Brazil is the second-largest exporter of timber, wood chips, pulp and paper to the US. Big-leaf mahogany (*Swietenia macrophylla*) - just one of 200 tropical hardwood tree species imported into the US - accounts for 57 per cent of US imports of tropical lumber by volume and 59 per cent by value. The US imports 32 per cent of its big-leaf mahogany from Peru, 90 per cent of which is illegal.

Finland is also a large supplier to the US, but it is likely that some of these imports actually originate in Russia, a country where between 25 and 50 per cent of its export trade is illegal.

Russia is also a direct source of imports to the US, in the form of plywood and pulp and paper.

Public procurement as a means of tackling illegal logging

The onus to tackle illegal logging is not solely on producing countries, but also on those countries that profit by purchasing or trading in illegal timber.

Public procurement is one policy option that will enable the G8 and China to tackle illegal logging. The governments of these countries wield considerable purchasing power, and by sourcing their timber and wood-based products from independently verified legal and well-managed forests, would greatly increase the volume of certified products in trade and, through the supply chain, improve global standards of forest management. Experience has shown that one of the most effective means of reducing levels of illegal logging is to support and promote *legal* logging.

A single procurement policy for each G8 country across all government departments would ensure that suppliers do not receive mixed signals about the environmental and social standards required to secure a government contract. These standards, or their equivalent, would have to be specified clearly in all tenders.

By supporting certification and labelling, governments could, at a stroke, achieve two crucial objectives: be assured that they were not purchasing illegally harvested logs, and that their goods were the products of sustainably managed forestry. In some countries where illegal logging is an issue, certification may be too difficult a goal to attain initially - in which case implementing a step by step approach must become a priority. The first step would be to eliminate illegal activity in the forestry sector. Various tools such as producers groups, the SGS certification support programme and the Tropical Forest Trust business to business agreements are available to assist implementation.

None of the governments of the G8 countries or China are currently implementing an effective public procurement policy specifying that as a minimum requirement, timber and wood-based products must come from legal sources and from sustainably managed forests. However, some governments are beginning to act and are pursuing different approaches to green procurement, while others - notably Italy - appear to be doing nothing at all. For instance, the UK is currently developing its minimum requirements for procurement, and along with China, France and Germany, is considering the role of certification and labelling as a means of verification. Based on responses to questionnaires, the Forest Stewardship Council (FSC) - an independent certification system - appears to be the standard by which all other systems are currently being assessed. The governments of France, Germany and the UK have specifically mentioned the FSC or equivalent certification standards with regard to seeking and implementing a green procurement policy as a means of identifying sustainable and legal timber. The UK has also recently entered into a bilateral trade agreement with Indonesia to improve forest law enforcement and governance, and to combat illegal logging and the international trade in illegally logged timber and wood products.

The Canadian government has stated that it fully supports certification as a tool in the demonstration of sustainable forest management and is currently considering how this might feature in the further development of green procurement checklists. There are indications that Japan is beginning discussions with Russia and Indonesia on bilateral agreements in support of

sustainable forest management initiatives. In the US, despite Environmental Protection Agency guidelines on how to integrate greener products into purchasing decisions and the implementation of programmes, adherence to these guidelines cannot be determined due to incomplete reporting and lack of monitoring. However, the US is continuing to investigate the possibility of green procurement policies and bilateral agreements with producer countries. Efforts are being made by the Russian forestry industry to introduce a system for tracing the origin of timber, as an element of environmentally-friendly and sustainable forest management.

The G8 and China should not stop trading with countries with poor forest law compliance or where laws are either weak or conflicting, but instead work with these governments and their forest industry to improve the situation. The provision of technical support and aid by the G8 would help improve standards of forest management, trade and governance.

The eradication of illegal logging and related trade will be a complex and lengthy process requiring long-term support from the governments of the G8 and China.

The governments of the G8 and China must:

- adopt and implement procurement policies that specify the purchase of timber and wood-based products from legal and responsibly managed forests. These policies should be supported by a series of actions - including voluntary bilateral trade agreements that commit the G8 to aid and technical support - in order to ensure implementation without contributing to the loss of High Conservation Value Forests in producing countries. It should be a priority that these agreements are developed, first and foremost, with producing countries with a record of poor governance, loss of High Conservation Value Forests, and low standards of forest management. Such trade agreements would help deliver procurement policies and, as a first step to certification, should cover support for verification of legal compliance based on independently verified chains of custody.

The governments must also:

- enter into partnerships with the private sector by supporting the Global Forest and Trade Network initiative in the development of producer groups in key producing countries. Members of producer groups commit to improving their management of forests and production, so that they will produce timber and wood-based products in accordance with FSC standards.

Further collaboration between governments and the private sector

More detailed recommendations are given in the main report, including specific guidance on implementing procurement policies through interdepartmental government working groups. These guidelines could equally be applied to the private sector, which would play a crucial role in helping governments to implement their green procurement policies.

There is an urgent need to reduce illegality and improve forest management standards in many countries supplying the G8 and China with timber and wood-based products. The political will generated by the G8 process now needs to be turned into actions: adopting and implementing procurement policies is one essential action that these governments must take.

1. Background

Illegal logging and the trade of illegal timber and wood-based products is a global issue that involves both developing and developed countries. Illegal logging occurs when timber is harvested, transported, processed, bought or sold in violation or circumvention of national or sub-national laws. The World Bank estimates that the loss of revenues due to illegal logging costs governments US\$5 billion annually, with a further US\$10 billion lost to the economies of producing countries¹. However, it not only reduces government revenues, but it also destroys the basis of poor people's livelihoods and, in some cases, even fuels armed conflict². Loss of forest resources directly affect the livelihoods of 90 per cent of the 1.2 billion people in the developing world who live in extreme poverty³.

In May 1998, the G8 (Canada, France, Germany, Japan, Italy, Russia, the UK and the US) formally confirmed that "illegal logging robs national and sub-national governments, forest owners and local communities of significant revenues and benefits, damages forest ecosystems, distorts timber markets and forest resource assessments and acts as a disincentive to sustainable forest management"⁴. A range of actions was agreed upon, including assessments of the nature and extent of international trade in illegally harvested timber (Box 1). Since then, the extent to which G8 nations are connected to the illegal international trade in timber and wood-based products has been analysed in a number of studies^{5, 6, 7, 8}. The common conclusion is that more can be done by the G8 in terms of implementing commitments and providing technical support to tackle illegal logging.

Box 1. The G8 Action Programme on Forests: actions on illegal logging

The G8 members agreed to:

- encourage assessments and information-sharing on the nature and extent of trade in illegally harvested timber, in order to develop counter-measures;
- implement measures to improve market transparency in the international timber trade;
- assess the effectiveness of, and gaps in, their internal measures to control illegal logging and international trade in illegally harvested timber;
- implement their obligations under international agreements aimed at combating bribery and corruption as they pertain to the timber trade; and
- work with other countries and organisations (such as the International Tropical Timber Organisation) to develop their own capacity to assess the extent of illegal logging and trade in illegally harvested timber and their capacity to develop and implement counter measures.

This report examines current public procurement policies and recommends measures that the G8 and Chinaⁱ should take to combat imports of illegal timber and wood-based products. The report also focuses on the importation of timber and wood-based products that are required to satisfy government demand, in order to show how the level of consumption by these governments affects the natural resource base of timber-producing countries. It also highlights how much influence these governments wield through their considerable purchasing power.

ⁱ China is included in this analysis because, in recent years, its imports have increased significantly due to a domestic logging ban and the reduction of import barriers.

By specifying environmental, social and legal criteria in public procurementⁱⁱ policies, governments have the power to ensure that negative impacts on forest resources of other countries, as well as on their own forest resources, are minimised.

Procurement is just one of a number of government policy options that can stimulate improvements in forest management. The successful control of illegal logging and related trade is likely to require the simultaneous implementation of many policies and strategies in countries that export, process and import forest products - an overview of which has recently been published⁹.

Box 2: What is Illegal?

Illegal logging and associated trade takes many forms, and occurs at various points along the supply chain from those who grant concession rights, to producers, to importers. Examples of illegal practices in the timber industry include the following¹⁰:

- illegal occupation of forest lands by forest companies;
- illegal logging (logging trees that are too small or a protected species; ringing trees so that they will die and can then be logged; logging in protected or prohibited areas outside concession boundaries; logging more than is permitted by the concession permit; obtaining logging permits through bribes or intimidation);
- illegal transport, trade and timber smuggling;
- transfer pricing;
- corrupt procurement; and
- illegal processing (without a permit; using illegally logged timber; breaking labour laws).

Illegal logging is a complex issue. For instance, one paradox is that many instances involving local people engaged in matters of survival, or in accordance with traditional practices, may actually be less environmentally damaging than legal, commercial logging. It would be a false assumption that all forest and trade regulations are effective in ensuring responsible management of forest resources, and that the rigorous application of forest and trade laws would solve the problem. Legality does not imply sustainability, but is the first in a series of steps *towards* sustainability, provided that these laws are just, fair and do not conflict with other laws.

One of the main difficulties is being able to differentiate between illegal and legal activities: in many cases conflicting or unjust laws, coupled with a lack of a credible chain of custody, make such differentiation nearly impossible.

ⁱⁱ Public procurement is the acquisition of goods, works, services and other supplies by government departments, contractors on government business, as well as local authorities and their contractors. Timber and wood-based products are procured for many purposes, including the following: paper use by central and local government, hospitals, schools etc.; furniture in government offices, schools, hospitals etc; tenders for public works (both refurbishment and new construction) such as court houses, hospitals, schools, transport infrastructure works and housing developments.

2. Overview of trade flows of timber and wood-based products in the G8 and China

Canada

Canada is a major producer of timber and wood-based products. While the great majority of its exports of timber, pulpⁱⁱⁱ, paper and wooden furniture are imported by the US, it also exports large volumes of timber, pulp and, to a lesser extent, paper to the rest of the world (Table 1). Canada's timber exports to the US mainly comprise sawn wood as well as fibreboard. It imports substantial quantities of timber (primarily logs but also sawn wood and wood chips) and paper mostly from the US rather than developing countries. Canada also imports some tropical timber products such as veneers and furniture from tropical countries.

China

China's imports have risen sharply in recent years, partly to offset reduced domestic production from forest areas affected by logging bans, and partly because of progressive reductions in tariffs and non-tariff trade barriers brought about by China's economy opening to international trade in the late 1980s. Although Russia has provided much of the timber to satisfy this increased demand, supplies from tropical producer countries have also risen: in 2000, they still supplied more than half of China's timber imports. Thus, the great majority of China's timber imports originate from countries where there are documented cases of illegal logging (see Section 7, Appendix I) that often occur in High Conservation Value Forests (HCVFs)^{iv} (Table 2). Logs comprise an increasing majority of China's imports; the proportion of imported fibreboard is also increasing, but plywood is decreasing.

China is a major importer of pulp and paper and its imports of both are increasing. Indonesia supplies an increasingly large amount of pulp (Table 3), a substantial proportion of which is likely to derive from natural tropical forest.

China is a major exporter of timber and wooden furniture, and its young export-oriented wooden furniture industry is growing rapidly. As the raw material for these products originates in countries with documented cases of illegal logging and disappearing HCVFs (Table 4), this export trade is at risk. Its timber exports primarily comprise "value-added" products (such as ornaments) and wood chips. China's paper exports - most of which are imported by Hong Kong and the US - are also growing rapidly, based partly on surplus capacity and low costs.

France

France is a major importer of paper and, to a lesser extent, timber and pulp. Its imports of these products are increasing - indeed, both its imports and exports of timber and pulp are among the 10 highest in the world. France is among the top four worldwide importers of paper (the main supplying countries are Belgium, Finland, Germany and Sweden) and the top five

ⁱⁱⁱ Pulp includes virgin fibre only, *i.e.* excludes pulp made from recycled paper products and from other materials such as straw.

^{iv} As defined by the Forest Stewardship Council: "High Conservation Value Forests are forests with environmental, biodiversity, landscape or socio-economic values of critical importance".

worldwide exporters of paper (the main importing countries are Belgium, Germany, Italy, Spain and the UK).

France is also the largest European and the second-largest global importer of tropical timber from Africa. The main supplying countries are Cameroon, Equatorial Guinea (in 2000), Gabon, Ivory Coast and Liberia (Table 2) - all countries where illegal logging has been documented. France also imports wooden furniture from Brazil (Table 4).

Germany

Germany is a major importer of timber, pulp and paper, and its imports of paper are increasing. It is a major exporter of timber and paper, mainly to other EU countries. Logs and sawn wood account for the great majority of its timber exports. Most of its timber (in the form of sawn wood) and wooden furniture imports come from Europe, particularly Finland, Poland, Romania and Sweden (Table 1, 2 and 4). Germany constitutes 16 per cent of Ghana's timber export market (Table 2).

Italy

Italy is a major importer of timber, pulp and, increasingly, paper. Sawn wood from Austria comprises the great majority of Italy's timber imports.

Italy is one of the world's leading exporters of wooden furniture. Whereas the raw material for some of these exports originates from forests within the EU, some also originates from countries with recognised problems of illegal logging, such as those of Central Africa¹¹ (Table 2). Italy comes a close second to France in EU tropical timber procurement from Africa: 40 per cent of the tropical timber that Italy imports from the region comes from Cameroon. Italy also exports a substantial and increasing amount of paper. Its exports of timber are also increasing.

Japan

Japan is one of the world's principal importers of timber (Table 1), with an increasing amount of its imported logs being sourced in the Russian Far East. Japan is the largest importer of wood chips and it also imports substantial quantities of pulp and, to a lesser extent, paper. Japan and China are the largest importers of tropical timber, but China imports from many more countries than Japan. On the basis of declared imports, Japan is the dominant export destination for Indonesia and Malaysia - two of the world's principal suppliers of tropical timber. Japan imports a third of China's timber exports (Table 2). It is also a major importer of east Asian-manufactured wooden furniture, the raw materials of which are likely to originate from countries where illegal logging is known to be a problem. Meanwhile, Japan exports little timber, pulp or paper.

Russian Federation

Russia, a major timber producer, imports relatively small amounts of timber and wood-based products when compared with other members of the G8 and China. Russia's exports, primarily logs, are increasing (mainly due to increased demand in China, as well as Finland - both of which are also significant exporting countries). The largest timber consumers in Russia are pulp and paper mills located mainly in the north-west of the country. Finland is the largest importer of Russian timber, with three Finnish companies - StoraEnso, UPM Kymmene, and Thomesto - together importing about 35 per cent of Russia's total timber exports. Prior to 2001, the second-largest purchaser of Russian timber was Japan (about 30

per cent – see Table 2). However, in 2001 China's imports were 50 per cent greater than Japan's.

While the European market's demand for Russian timber is stable, the countries of the Asia-Pacific region demonstrate rapid growth in consumption. The neighbours of the Primorskiy Krai region - China, Japan, and Korea - have an ever-increasing demand for round wood. Exports to China (about 15 per cent) have grown over the past three years, and have already reached the export volume that was not expected until 2010¹². Proposed projects to build new roads between Russia and China - for example, through the Altai Mountains - could have also have a hugely negative impact on the forests of this region.¹²

Approximately 25 per cent of Russia's exports go to EU countries. The UK is the fifth-largest importer of timber and timber products from Russia¹³.

Russia's imports of timber, pulp and paper are negligible in the context of this analysis (Table 1).

United Kingdom

The United Kingdom is a major importer of timber and paper, and depends on imports for roughly 85 per cent of its consumption. It also imports a substantial amount of pulp. Sawn wood comprises the great majority of the UK's timber imports. Indonesia, Brazil and Malaysia supply more than half the UK's tropical timber requirements (Tables 1 and 2). The UK's tropical timber imports from central Africa derive primarily from Cameroon¹¹. The UK's imports of tropical wooden furniture derive principally from Brazil and Vietnam (Table 4).

The UK exports a substantial quantity of paper. Ireland is its principal market for timber and paper.

United States

The US is a major exporter of timber, pulp and paper. Canada supplies the great majority of the US's imports of pulp and paper, and timber (mainly sawn wood and, to a lesser extent, fibre-board) (Table 1). China and Canada supply most of its increasing imports of wooden furniture. The US also imports wooden furniture from Indonesia, Malaysia and Thailand (Table 4).

Brazil is the second-largest exporter of timber, wood chips, pulp and paper to the US (Tables 1, 2 and 3). Big-leaf mahogany (*Swietenia macrophylla*) - just one of 200 tropical hardwood tree species imported into the US - accounts for 57 per cent of US imports of tropical lumber by volume and 59 per cent by value¹⁴. The US imports 45 per cent of its big-leaf mahogany from Brazil, 32 per cent from Peru and 18 per cent from Bolivia¹⁵. Ninety per cent of Peru's big-leaf mahogany exports to the US are illegal¹⁶.

Finland is also a large supplier to the US, but it is likely that some of these imports actually originate in Russia, a country where a significant part of its trade is illegal¹². Plywood panels are also imported from Malaysia. At least a third of Malaysia's harvest - and therefore its exports - is thought to be illegal¹⁷. Malaysia's harvest is supplemented by imports from Indonesia, many of which may also be illegal in origin¹⁸. In addition, the Russian Federation is a direct source of imports, in the form of plywood and pulp and paper (Table 3).

Table 1: G8 and China imports of timber, wood chip, pulp, paper and wooden furniture during 2000 (million cubic metres roundwood equivalent volume).

source	Canada	France	Germany	Italy	Japan	Russia	UK	US	ZG8 imports	China
Total	28	45	75	56	89	2	53	205	552	56
Australia					6.1				6	
Austria		1.0	5.5	11.9	1.3				21	
Belarus			1.5							
Belgium		5.9	2.8				1.5		11	
Brazil			1.6	1.2	2.1		1.9	7.7	16	0.9
Canada		2.0	3.6	3.3	16.7		2.8	166	195	4.0
Chile					3.4			1.8	7	0.9
China					5.9			3.7	8	
Croatia				1.1						
Czech Republic			2.9							
Denmark			1.0							
Finland		3.9	10.3	2.1	2.4	0.6	9.2	2.6	31	
France			4.5	4.8			2.7		13	
Gabon										1.1
Germany		8.4		7.1			5.2	2.1	24	1.7
Hong Kong										1.2
Hungary				1.6						
Indonesia					9.5		1.1	3.0	15	9.4
Ireland							1.3			
Italy		2.7	2.4				1.2	0.9	8	
Japan										1.5
Latvia			1.0				3.7		5	
Malaysia					8.5			1.9	11	4.9
Mexico								3.3		
Netherlands			3.6				1.8		9	
New Zealand					4.5			0.9	5	1.4
Norway			1.5				1.8		5	
Poland			6.5						9	

source	Canada	France	Germany	Italy	Japan	Russia	UK	US	ZG8 imports	China
Portugal		0.9	1.0				0.9			
Russia		1.0	2.8	1.4	6.8		1.6	0.9	15	9.1
Slovenia				0.9						
South Africa					2.3					
South Korea								1.1		3.9
Spain		2.6		1.0			1.1		6	
Sweden		3.3	10.6	3.4	1.8		8.0	1.0	28	
Switzerland		1.1	3.0	4.5					9	
Taiwan								0.9		2.5
Thailand					0.9			1.0		2.1
UK		1.3								
US	25	1.5	2.0	3.4	15.4		2.5		50	4.6

Source: World Trade Atlas (other than EU countries), Eurostat (EU countries only)

Units: million cubic metres roundwood equivalent volume

Note 1: including wood chips would involve double counting if the chips derived from saw mill residues

Note 2: shows which countries (directly) supplied a roundwood equivalent volume more than approximately 0.9 million cubic metres

Note 3: Approximately 90 per cent of imports are accounted for in Σ columns

Note 4: See Section 7, Appendix I and II, for instances of illegal logging and related trade within the listed countries

Table 2: Proportion of timber exports from countries with illegal logging and related trade, and HCVF loss, that were imported by G8 countries and China during 2000 (million cubic metres roundwood equivalent volume).

	Total	Others	Canada	China	France	Germany	Italy	Japan	Russia	UK	US
Latin America											
Brazil	10	31%								11%	33%
Europe (including Russian Far East)											
Russia	39	52%		16%				17%			
Latvia	11	55%								34%	
Czech Republic	6	51%				36%					
Estonia	7	79%								10%	
Tropical Africa											
Gabon	2	17%		46%	24%						
Cameroon	2	43%		11%	11%		24%				
Equatorial Guinea	1	13%		60%	18%						
Ghana	1	15%			11%	16%	13%				38%
Liberia	1	14%		47%	24%		12%				
East Asia and Tropical Oceania											
Burma	2	57%		42%							
Cambodia	0.2	21%		78%							
China	9	49%						33%			15%
Indonesia	24	35%		17%				32%			9%
Malaysia	27	44%		18%				29%			
Papua New Guinea	2	25%		36%				37%			
Vietnam	1	42%						51%			
Thailand	3	38%		27%				19%			14

Units (Total): million cubic metres roundwood equivalent volume

Source: World Trade Atlas (Canada, China, Russia, USA), Eurostat (France, Germany, Italy, UK), Japan Exports and Imports

Note 1: Proportions less than 10% not shown which explains why the sum of the percentages given in the rows is less than 100 per cent.

Note 2: Countries exporting timber less than about one million cubic metres RWE volume not shown

Note 3: See Section 7, Appendix I and II, for instances of illegal logging and related trade within the listed countries

Table 3: Proportion of pulp and paper exports from countries with illegal logging and related trade, and HCVF loss, that were imported by G8 countries and China during 2000 (million cubic metres roundwood equivalent volume).

	Total	Others	Canada	China	France	Germany	Italy	Japan	Russia	UK	US
Latin America											
Brazil	14	30%									31%
Europe (including Russian Far East)											
Czech Rep	2	25%			13%	36%	19%				
Russia	6	24%		45%		14%					
Tropical Africa (nil)											
East Asia and Tropical Oceania											
China	5	50%									38%
Indonesia	15	41%		37%				10%			

Units (Total): million cubic metres roundwood equivalent volume

Source: World Trade Atlas (Canada, China, Russia, USA), Eurostat (France, Germany, Italy, UK), Japan Exports and Imports

Note 1: Proportions less than 10 per cent not shown which explains why the sum of the percentages given in the rows is less than 100 per cent.

Note 2: Countries exporting pulp and paper less than about one million cubic metres RWE volume not shown

Note 3: Data compiled for the year 2000.

Note 4: See Section 7, Appendix I and II, for instances of illegal logging and related trade within the listed countries

Table 4: Proportion of wooden furniture exports from countries with illegal logging and related trade, and HCVF loss, that were imported by G8 countries and China during 2000 (million cubic metres roundwood equivalent volume).

	Total	Others	Canada	China	France	Germany	Italy	Japan	Russia	UK	US
Latin America											
Brazil	0.3	14%			24%					15%	37%
Tropical Africa – negligible											
East Asia and Tropical Oceania											
China	3.0	31%									54%
Indonesia	1.1	23%						18%			32%
Malaysia	1.5	23%						13%			49%
Thailand	0.8	7%						29%			51%
Vietnam	0.2	50%						25%		13%	

Units (Total): million cubic metres roundwood equivalent volume

Source: World Trade Atlas (Canada, China, Russia, USA), Eurostat (France, Germany, Italy, UK), Japan Exports and Imports

Note 1: Proportions less than 10% not shown which explains why the sum of the percentages given in the rows is less than 100 per cent.

Note 2: Countries exporting wooden furniture with a roundwood equivalent volume of less than about 0.2 million cubic metres not shown

Note 3: source data (in units of either weight or import value) is converted here to give estimates of roundwood equivalent volume

Note 4: See Section 7, Appendix I and II, for instances of illegal logging and related trade within the listed countries

3. Assessment of the G8 and China's public procurement

Together, the G8 countries and China import 609 million cubic metres of Round Wood Equivalent volume (RWE) (timber, wood chips, pulp, paper and wooden furniture) per annum (Table 5). This amounts to two thirds of the timber, pulp, paper and wooden furniture that is traded globally¹⁹, so their purchasing power has tremendous influence. It is estimated that on average, 18 per cent of this trade (109 million cubic metres) fulfils government procurement demands (See Methodology, Section 7, Appendix II). The approximate economic value of this procurement is US\$23 billion (Table 5). By comparison, it is estimated that less than 1 per cent (approximately nine million cubic metres) of internationally traded timber is certified as coming from well-managed forests²⁰.

Table 5: Ranking of G8 and China's public procurement of timber, wood chips, pulp, paper and wooden furniture based on volume of country imports attributed to Government procurement (calculated using the figures of government consumption expressed as a percentage of GDP).

Country	Volume of Country Imports (million cubic metres or cum)	Govt Consumption as % of GDP	Volume of Imports Attributed to Government (million cum)	Value of Imports Attributed to Govt Timber Procurement (bn US\$)
US	205	18%	37	6.6
Japan	89	17%	15	2.7
Germany	75	19%	14	3.4
Italy	56	18%	10	1.6
France	45	23%	10	2.8
UK	53	19%	10	2.5
China	56	13%	7	1.2
Canada	28	18%	5	1.6
Russian Fed	2	15%	0.3	0.1
Total	609	-	109	22.5

China and the G8 countries import timber and other wood-based products in varying amounts and from different regions of the world (Table 1). Individual states may therefore have particularly significant impacts on a region or a single country. For instance, the US imports more than a third of the G8 and China's total imports - predominantly from Canada and, to a lesser extent, Latin America and east Asia (Table 1 and 5). Japan imports primarily from North America, Asia, Oceania and Russia; northern EU countries from Europe; southern EU countries from Europe and Africa; and China from Asia, Oceania, Africa and Europe (Table 1). Canada and Russia, two large timber producing countries, import the least amount of timber. Many of the producing countries within these regions have one or more of the

following in common: high levels of foreign debt²¹, poor governance, high levels of poverty, unsustainable forest management, and the loss of High Conservation Value Forests. These factors, among others, contribute to illegal and unsustainable trade.

Even when imports from a particular producing country do not constitute a large proportion of the total amount imported, it is essential to remember that they may constitute a significant proportion of the producing country's *exports*, so could be extremely influential in the forestry sector of that producing country. Consuming countries therefore need to consider their impact on all countries that provide them with timber and wood-based products, and not just the volume of timber and products imported.

With the exception of Canada and Russia, it is estimated that all governments examined here procure significant amounts of imported wood products (Table 5). Many countries supplying timber and other wood-based products are plagued with corruption and illegality within their forest industry. Table 6 summarises estimates of proportions of illegal timber, pulp and paper that is imported by the G8 and China. These estimations and the assumptions (Appendix II) behind them are likely to change but in the absence of agreed data they, at the very least, provide an indication of the scale of the problem. In the absence of procurement policies, the governments of the G8 and China are likely to be procuring a similar proportion of illegal timber, pulp and paper.

Table 6: Estimation of illegal timber, pulp and paper imported by G8 and China in 2000 (million cubic metres roundwood equivalent volume).

	Timber			Pulp			Paper			Sum		
	Total	Illegal	%	Total	Illegal	%	Total	Illegal	%	Total	Illegal	%
Canada*	1	0	30	0	0	1	1	0	8	2	0	16
China	26	11	44	12	4	33	19	3	14	56	18	32
France	12	2	13	9	0	3	22	0	1	43	2	5
Germany	25	2	9	15	0	3	31	1	3	71	3	5
Italy	30	1	4	12	0	3	14	0	2	56	2	3
Japan	70	16	22	11	0	4	7	1	18	88	17	20
Russia	0	0	19	0	0	3	2	0	2	2	0	4
UK	21	3	14	6	0	4	24	1	4	52	4	8
US*	19	5	26	5	0	1	13	1	10	37	6	17
Sum	204	40	20	69	6	8	134	8	6	407	53	13

* excludes imports from US (Canada) or Canada (USA)

Units: million cubic metres roundwood equivalent volume (unless shown as percentage)

Note 1: Figures are rounded to nearest integer eg. 0 implies less than 0.5. 1 implies 0.5 – 1.4

Note 2: For a list of supplying countries see Appendix I and II

Note 3: Sums are of actual figures, not integers, and then rounded to the nearest whole number

The onus should not rest only on the governments of timber producing countries to ensure that their forest industry operates within their domestic legislation. While it remains profitable and cheaper for those in the G8 and China to purchase timber of illegal origin, producer countries will find it extremely difficult to eradicate illegal logging. Governments of

consuming countries therefore have a responsibility to ensure that they take action to support the eradication of illegal logging and related trade, and to procure only timber that has been produced legally and in a responsible manner. As producing countries increase the proportion of legal and sustainable wood products available, they are likely to gain substantially higher revenues from their exports - leading to a reduction in their indebtedness and improved creditworthiness, less dependence on aid from the G8 and China, better prospects for poverty alleviation, and economic stability if combined with good governance. Evidence from countries such as Bolivia that have made progress in reducing illegal logging suggests that an important way to achieve this is to support and promote legal logging²².

For governments to implement a green procurement policy, enforcement agencies need to be able to distinguish between timber of legal and illegal origin. At present, this is almost impossible because of the lack of monitoring of imports and exports, as well as insufficient data accompanying traded goods. For example, much of Indonesia's pulp is exported to China, which then exports it as paper. If China does not require evidence of legality or sustainability to accompany its pulp imports, then the country to which China exports the paper has no way of knowing whether the purchase complies with any procurement policy it may have, or with the national legislation of the country from which the pulp originated. There are numerous other examples of such supply chains, such as the trade of timber and wood products from Finland and Sweden to the G8 (Table 1), where a proportion of the timber was actually illegally harvested in north-west Russia (Section 7, Appendix I - Russia). This lack of traceability, transparency and accountability contributes to the continuance of the illegal timber trade and the accompanying negative environmental, social and economic impacts.

A mechanism for tracing products from legal sources to the point of purchase - a tracing or chain of custody system - is an essential component of any procurement policy that requires timber to be purchased from legal sources. For instance, through the chain of custody system employed by the Forest Stewardship Council (FSC), purchasers of more than 10,000 products can be assured that the wood in question was sourced from a forestry operation achieving FSC standards of forest management. A similar chain of custody approach could be used to identify all timber that comes from legal sources.

The World Bank-WWF Alliance has developed practical guidelines on the verification of wood sources, following a workshop on *Verifying wood sources: Developing effective log tracking and chain of custody systems*²³. The workshop report outlines the principles which underlie a chain of custody system and provides a basis for anyone wishing to implement such a system. It also summarises the various techniques available to help implement a chain of custody, with guidance on when they are appropriate, how they can be used, their availability and their costs. The report provides a sound practical basis for further discussion about the implementation of mechanisms for verifying that wood products come from a legal source.

4. What are governments doing to procure responsibly?

It is only in recent years that governments have begun to investigate procurement as a tool for implementing sustainable development. In this sense, they have been slower to react than the corporate world, some members of which have incorporated not only economic, but also social and environmental standards into their business practices. For instance, there are now more than 850 members of the Global Forest and Trade Network²⁴ - a global network of buyers and producers groups committed to promoting certification and sustainable forest management.

The G8 and China have signed numerous forestry agreements resulting in “statements of positive *intention*” to support sustainable forest management (Box 3). But as yet, none of these governments has successfully implemented a procurement policy that ensures that all the timber and wood-based products they purchase are from well-managed forests.

Box 3: International agreements that support sustainable forest management

Agenda 21, Chapter 11, Section A. Adopted at the UN Conference on Environment and Development (UNCED), Rio 1992, by more than 170 governments:

“Objective 11.2: To strengthen forest-related national institutions to enhance the scope and effectiveness of activities related to the management, conservation and sustainable development of forests and to effectively ensure the sustainable utilization and production of forest’s goods and services...”

Santiago Declaration, 3 February 1993. Signed by countries representing more than 90 per cent of global resource of temperate and boreal forest - Australia, Canada, Chile, China, Japan, Mexico, New Zealand, Republic of Korea, Russian Federation, US and Uruguay:

“Recognising that the sustainable management of all types of forests, including temperate and boreal forests, is an important step to implementing the Statement of Forest Principles and Agenda 21, adopted by UNCED in Rio de Janeiro in 1992, relevant to UN conventions on biological diversity, climate change and desertification. Also recognising the value of having an internationally accepted understanding of what constitutes sustainable management of temperate and boreal forests etc.”

Helsinki Declaration on the protection and sustainable management of forests in Europe, 17 June 1993. Signed by France, Germany, Italy, the UK and 30 other European countries:

“Intention 4: To stimulate and promote without delay, the implementation of the Rio Declaration, Agenda 21, the UNCBD (UN Convention on Biological Diversity) and the UN framework convention on climate change...”

ITTA (International Tropical Timber Agreement) 1994. Signed by numerous producer and consumer countries of tropical timber, including China and all G8 countries except Russia.

“Objective d: To enhance the capacity of members to implement a strategy for achieving exports of tropical timber and timber products from sustainably managed sources;

Objective e: To promote the expansion and diversification of international trade in tropical timber from sustainable sources by improving the structural conditions in international markets;

Objective k: To improve marketing and distribution of tropical timber exports from sustainably managed sources...”

The country profiles listed below are based on responses to a questionnaire (see Section 7, Appendix III) sent to the governments of the G8 and China in February 2002. No official response has yet been received from France, Japan, Italy, Russia or the US. Of those that did reply, all are considering certification and labelling as a means of ensuring that minimum environmental, social and legal requirements are met - an approach adopted in Denmark and the Netherlands - as indicated by their response to the same questionnaire. As it is mentioned in all responses, the FSC appears to be the international standard by which all other accreditation systems are currently assessed.

Canada: In a full response to our questionnaire, the government cited the development of its Environmental Choice Programme's (ECP) "Green Procurement Policy". This directs government agencies to take environmental considerations into account when making purchasing decisions. The ECP has produced green procurement checklists which set out the environmental attributes that should be considered by government purchasers. In addition, the ECP has a "green furniture" checklist, which states that "wood materials used in furniture should be grown and harvested in a sustainable manner". Neither the policy nor the checklists make any specific requirements regarding the legality of the raw materials. The government fully supports certification as a tool in the demonstration of sustainable forest management and is currently considering how this might feature in the further development of the checklists.

China: The government has set up an informal advisory body for trade and the environment which includes work on forestry, timber and non-timber forest products. China has general procurement policies that relate not only to the life-cycle assessment of products, but also to environmental aspects of imported timber. Timber procurement specifically identifies tropical hardwood which carries the risk that the "overall forest impact" is not considered, because many issues highlighted by the crisis in tropical forests also occur in boreal and temperate forests.

China requires contractors to meet in full all government environmental requirements. The government's reply states that it already checks wood and wood products for legality at its borders, and that a register is required. FSC certification is being considered as a means of meeting its environmental obligations.

France: Although a response was not received in time for inclusion in this report, the Minister for the Environment stated on 11 April: "The government has decided to include criteria into its public procurement practices which will favour the purchase of timber by FSC or equivalent certification systems". However, last year France passed a law stating that all award criteria should be directly linked to the subject of the public contract, and that environmental criteria should be linked to the performance of the product, therefore excluding the specification of environmental criteria to process and production methods. Thus, it is possible to stipulate environmental requirements to the technical criteria, but not to the award criteria. In order to implement the commitment to green procurement, the law will have to be changed. As an EU member state, France will also have to implement the European Commission directive on public procurement^v, which outlines EU rules relating to procurement activities²⁵.

Germany: The government has no stated procurement policy, but as an EU member state, Germany should implement the EU directive. It does not have an interdepartmental approach to procurement, but does have a specialist department within the Department of Trade and Technology. The government acknowledges the importance of “efforts against the illegal felling of timber and the trade in illegally harvested timber” but notes that “import controls to ensure the observance of foreign statutes and the prosecution of possible violations can be carried out, at best, in concrete cases and at the specific request of the country involved”²⁶. Germany is also considering certification and labelling as a means by which a minimum procurement standard can be met. The government has announced that it will change its public procurement policy to favour the purchase of timber certified by the FSC or equivalent certification systems²⁷.

Italy: Despite repeated requests, no response to the questionnaire was received. It could be inferred from this that no policy is in place.

Japan: No official response has been received. However, positive statements of intent to minimise Japan’s impact on forests through its trade were made by the government at the second meeting of the United Nations Forum on Forests this year. Unofficially, there are signs²⁸ that Japan is becoming concerned at “upstream impacts of purchasing forest products”. Concern was expressed²⁸ that Japanese policy on wood purchase “does not go to forest level” and it was also indicated that the government “wants sustainable forest management”. It appears that discussions on bilateral arrangements in support of sustainable forest management initiatives are starting with Russia and Indonesia, two major suppliers to the Japanese market. There appear to be cautious signs of hope that Japan will begin to move towards responsible procurement of wood products within the public sector.

Russia: No response to the questionnaire was received. Government procurement of timber from other countries is estimated to be negligible and the purchase of illegal timber from domestic sources by the government is outside the scope of this study. It is worth noting, however, that efforts are being made by the Russian forestry industry to introduce a system for tracing the origin of timber, as an element of environmentally-friendly and sustainable forest management. An Association of Ecologically Responsible Loggers of Russia has been formed and more than 400,000 hectares of forest land have been certified under the FSC system. The experience of wood product verification amassed by foreign companies consuming Russian timber, such as StoraEnso, UPM Kymmene and IKEA, is being promoted and adopted by Russian companies¹². More than two million hectares of forest are planned to be FSC-certified before the end of 2002, with no less than 10 million hectares (a seventh of all Russian commercial timber) to be certified, or ready for certification, by 2005¹³.

^v The proposed new legislation for the EU Public Procurement directive states that the principle of the lowest price should be the criterion for awarding contracts. As a result, criteria relating to the production and trading process of the product cannot be taken into account, in the award phase, if they are not visible in the end-product. In practice, this will discourage environmentally, socially and ethically sound public procurement for many products and services subject to public tendering. The Commission proposal is not in line with the EU Treaty requiring that environment and development policies need to be integrated into all EU policies, nor is it in line with the jurisprudence of the European Court of Justice which has stated that the only constraint on using social and ecological criteria is that they should be non-discriminatory and should not represent barriers to free movement of goods and services. Furthermore, the Commission proposal is in contradiction with the EU social and environmental policy.

UK: The Minister for the Environment announced a procurement policy in July 2000²⁹, but two years later, it has not yet been effectively implemented. A scoping study commissioned to investigate current UK government procurement practice is due for completion in June 2002. To assist and coordinate wood purchase policy across the whole range of government departments, an interdepartmental working group led by the Department for the Environment, Food and Rural Affairs (DEFRA) reports directly to the Minister.

The timetable for the implementation of the government's policies on wood procurement, and the stages by which it can be implemented, has recently been the subject of a stakeholder consultation process involving NGOs and trade representatives.

US: No response was received. The Resource Conservation and Recovery Act of 1976 (RCRA) provides a framework for US federal procurement³⁰. In addition, the President issued an order in 1998 to encourage federal agencies to seek to buy products "that are environmentally preferable and/or bio-based". In June 2001, the US General Accounting Office produced a report³⁰ reviewing progress in this area. The report states that information on purchasing practices by the government is difficult to obtain due to a lack of an automated tracking system, and it points out that major purchase sources are excluded from agency reports. It also indicates the existence of legal frameworks which appear to favour green procurement, and the fact that these are largely ignored by the federal agencies, procurement bodies and contractors. The report also reveals that despite Environmental Protection Agency guidelines on how to integrate greener products into purchasing decisions and the implementation of programmes, adherence to these guidelines cannot be determined due to incomplete reporting and lack of monitoring.

The four major US government procuring agencies' efforts to promote procurement policies have generally not increased awareness, with only the Department of Energy reviewing and monitoring purchases.

5. Discussion

At present, of the governments of the G8 countries and China, only the UK has started to take action to implement a green procurement policy for forest products. Others, notably Italy, appear to be doing nothing at all. It is difficult to accurately quantify the extent to which the governments of the G8 and China may be procuring illegal timber, but it has been estimated that up to a third of the timber and wood-based products procured by those governments may be illegal. Without responsible procurement policies, the G8 and China are supporting the business activities of those involved in the trade of illegal timber and wood products. Trade data presented in this report almost certainly underestimates the true picture because in many countries - for example, Burma³¹ - the timber recorded by the forestry departments is only a small proportion of the actual felling and/or exports. Illegal logging and the subsequent illegal trade in timber pose particular threats to high biodiversity forests³², as well as to long-term poverty alleviation and development.

Governments must ensure that they purchase only legal timber sourced from sustainably managed forests, so that they do not contribute to illegal activities and unsustainable levels of timber harvesting and trade. Verification of sustainability through certification systems meeting standards equivalent to those of the FSC would ensure legality. A government procurement policy that specifies certified wood as a preferential choice in contracts would have positive impacts throughout the supply chain, and lead to improvements in forest management.

A number of tools exist to help implement procurement policies. Certification and chain of custody systems - notably the FSC - were set up to offer a credible choice to consumers wishing to purchase only products produced to high environmental and social standards. Chain of custody systems that enable the supply chain to be traced back to a forest managed in accordance with national legislation, as well as to standards of forest management equivalent to those of the FSC, have been developed and should be applied. In some countries where illegal logging is an issue, certification may be too difficult a goal to attain initially. In these countries it should be a priority to encourage a step by step approach to certification. The first step would be to eliminate illegal activity in the forestry sector. Various tools such as producers groups²⁴, the SGS certification support programme³³ and the Tropical Forest Trust business to business agreements³⁴ are available to assist implementation.

By supporting certification and labelling, governments could, at a stroke, achieve two crucial objectives: be assured that they were not purchasing illegally harvested logs, and that their goods were the products of well-managed forestry.

The governments of the G8 and China must adopt and implement procurement policies for timber procurement. Governments that have made statements of intent regarding the adoption of green procurement policies need to make further progress in establishing minimum procurement requirements. A number of steps need to be taken, including discussions with trade bodies and suppliers, and comparative evaluation of accreditation for certification organisations. These are all topics of some complexity and in order to keep the process moving, it is likely that an evaluation of short/medium and long-term strategies and actions will be necessary. Thus, timetables can be produced by which progress can be judged. This

process is under way in the UK through the Timber Scoping Study, commissioned in October 2001.

In the absence of a comprehensive approach to timber procurement in each country, government departments will continue to send out mixed signals to suppliers about their preference for certified timber and wood-based products. This will then act as a disincentive to suppliers in their attempts to source certified timber and products, in order to meet government requirements³⁵. For this reason, each government should develop a single policy, with targets, that applies to all its departments. It should also put in place mechanisms to ensure consistency in communicating its procurement requirements, as the UK has done. The US, for example, could take advantage of the Office of the Federal Environmental Executive, which was established in 1998 to recommend initiatives for government-wide procurement preference programmes, but which is severely under-budgeted.

The adoption of a “whole government approach”, such as that established by China, Denmark, the Netherlands and the UK, enables governments to fully understand all aspects of their timber procurement, and allows the sharing of knowledge and best-practice in a cost-effective way. This also reduces the likelihood of an individual department procuring unsuitable timber, which may result in negative publicity for the whole government^{vi, 36}. A further advantage of an “interdepartmental approach” is that assessments of timber procurement can be fully comprehensive^{vii}.

Procurement on behalf of government by private contractors is another important aspect that must be addressed. Governments might argue that they cannot be directly responsible for timber and wood-based products purchased on their behalf^{viii}. However, they must ensure that those acting on their behalf purchase in an ethically responsible manner. In order to avoid challenges under WTO anti-discrimination rules³⁷, it is imperative that governments include their procurement requirements (such as certification and labelling) as part of the technical specification before contracts are put out to tender. A clear, legally vetted and broadly applied timber procurement requirement (either internally within government or at an intergovernmental level) will allow government agencies to apply consistent specifications when drafting tender documents. Unless companies receive clear specifications regarding environmental and social standards when they bid for government contracts, it is unlikely that such standards will be reached. Therefore, it is at this point that practical influence must take effect, if contractors for government works are to be obliged to quote timber produced to FSC or equivalent standards. The use of the term “equivalent” and its definition is also crucial under anti-discrimination legislation.

However, the G8 and China should not stop trading with countries with poor forest law compliance or where laws are either weak or conflicting. Instead, they should work with these governments and their forest industry to improve the situation. The provision of

^{vi} For instance, in 1999, discussions on forest protection, hosted by a UK Minister, were held around a brand new mahogany table.

^{vii} For example, the consultation paper circulated in March 2002 as part of the Timber Scoping Study of the UK Government.

^{viii} For instance, “The policy of the Chinese Government is to regulate firms. It does not purchase timber. (sic)” – Dr Hu Tao, Coordinator of the Working Group on Trade and Environment, China Council for International Cooperation on Environment and Development.

technical support and aid by the G8 would help improve standards of forest management, trade and governance. In turn, timber producing countries could assist with implementing green procurement policies in consumer countries by providing, *inter alia*, prior notification of shipments of logs and validating their legality. Such a relationship is being explored through the recent Memorandum of Understanding between Indonesia and the UK³⁸.

The eradication of illegal logging and associated crimes will be a complex and lengthy process requiring long-term support from the G8. There is an urgent need to begin phasing in new procurement policies which are underpinned by a suite of measures, including support for the step by step approach to certification and the development of voluntary bilateral trade agreements.

6. Recommendations

The Governments of the G8 and China should:

- commit to and implement policies that specify the purchase of timber and forest products from well-managed forests. Law compliance would be a crucial first step;
- support the adoption of voluntary bilateral trade agreements that ensure the supply of legal timber as a first step in applying responsible procurement policies;
- encourage consumer countries to provide aid and technical assistance to producer countries, so that the root causes of forest crime (including poverty alleviation) can be addressed;
- promote improved transparency and enforcement of existing laws: where necessary, encourage amending or drafting new legislation and strengthening of implementation;
- promote independent monitoring and auditing schemes, such as that provided by the Forest Stewardship Council, for forest management and tracking wood products from the forest to the end user;
- support and promote the increased use of global forest and trade networks to create markets for legal and sustainable timber. This would include the development of producers groups in Asia and Africa, which could help satisfy procurement demands;
- assist the implementation of systems for verifying legal compliance, especially in countries where certification will take some time to develop;
- in the absence of available certified products, the G8 and China should seek to procure from companies that are members of the Global Forest and Trade Network, or from those implementing a monitored phased approach to certification;
- make the import of illegal timber and wood-based products illegal, thereby obviating the need to specify that all procured goods must be legal in origin, provided the chain of custody mechanism is in place; and
- support the creation of, and adopt existing, investment screens for government and private sector investment in key wood product sectors.

In addition, we recommend the following in order to assist in implementing timber procurement policies:

Operational

- that the governments of the G8 and China appoint (if they have not done so already) and provide sufficient support for an interdepartmental working group to coordinate policy on procurement of all imported timber and wood-based products to include timber, timber goods, furniture, construction materials and components, pulp and paper goods and non-timber forest products;
- that any government working group operates within a framework of transparency: publishing its minutes, producing draft timetables for achieving the stages outlined earlier and including bi-annual public reporting. These working groups should also approve accreditation systems for chain of custody and forest management certification.

Policy

- that norms are decided at an international level for chain of custody verification for timber and wood products (in the first instance), and in due course standards required for legal origin and forest level certification of sustainable forest management;
- that “green procurement” clauses be immediately included in all tenders for government contracts and that preference be given to contractors who can show they are making efforts to comply with those clauses;
- that intergovernmental liaison and communication be maintained and those standards for procurement be harmonised, preferably at a global level;
- that all ongoing government-supported instruments and measures for responsible forest management include clauses that bind signatory countries to green procurement norms;
- that all the above measures complement other international instruments and agreements on forest protection within the overall framework of Chapter 11 of Agenda 21, as well as the resolutions of the Ministerial Declaration from the Forest Law Enforcement and Governance Conference held in Bali in September 2001, and the OECD Council recommendations of 23 January 2002³⁹; and
- that those G8 and EU countries that have policies specifically referring to tropical timber be urged to extend these policies to include all timber products in international trade.

Capacity-building

- that development support be given to forest departments and projects in producer countries that are preparing for chain of custody and forest management certification and labelling under approved accreditation systems;
- that certification and labelling be included in training seminars for architects, specifiers, procurement staff, buyers, contractors, suppliers and policy advisers within government; and
- that government procurement institutions, professional bodies and purchasing consortia who supply government bodies are briefed by interdepartmental working groups on certification and labelling.

7. Appendices

APPENDIX I. COUNTRIES SUPPLYING THE G8 AND CHINA WITH TIMBER AND WOOD-BASED PRODUCTS THAT HAVE RECORDED CASES OF FOREST CRIME

In the following countries, illegal activities in the forest sector have been documented by many organisations. However, some estimates of illegal logging rates may have changed since publication, or may apply only to particular regions of a country, rather than to the whole. This is not an exhaustive review of the global scale of illegal logging and reflects the lack of comprehensive information available for many countries.

Latin America

Brazil: IBAMA estimates that 80 per cent of logging in the Brazilian Amazon is illegal⁴⁰. The UK's Department for International Development has stated that mahogany logging, which mostly occurs on indigenous reserves, has been implicated in serious social disruption of indigenous communities, including assassination, alcohol- and drug-related problems, and illness⁴¹. On the positive side, Brazil now has a total of 1.15m hectares of certified forests, of which 0.35m ha are native Amazon forests, 0.2m ha are native Atlantic forests, and the remainder are plantations. In addition to the forest-management certifications, 95 private companies in Brazil have obtained FSC chain of custody certification covering the processing of logs, lumber and charcoal, the manufacture of wood components and finished goods, and the production of food- and cosmetic-grade products such as heart of palm and phyto-therapy ingredients.

Within the G8 and China, Brazil's main timber markets are the US and UK, while its main pulp and paper market is the US (31 per cent). Brazil is also a major source of wooden furniture for the US (37 per cent), France (24 per cent) and the UK (15 per cent).

Africa

Cameroon: Fifty per cent of logging in Cameroon is illegal⁴². In 1997, most large timber companies in Cameroon were reported to be involved in illegal trade, thus endangering wildlife⁴³. Between 1992 and 1995, the estimated loss of tax revenues to the government was more than 50 per cent⁴³. The problems also extend to protected areas⁴⁴. If recent rates of logging and concession allocation continue, large-scale commercial forestry will be exhausted within 10 years⁴⁵.

Within the G8 and China, Cameroon's main timber markets are Italy, China and France (importing 24 per cent, 11 per cent and 11 per cent of Cameroon's timber exports respectively).

Gabon: Implementation of forest legislation (Law 1/82) remains difficult, with almost 75 per cent of planned decrees never having been written, and with several logging concessions on the government's 1997 list of valid logging permits occurring in protected areas⁴⁶. Analysis of ITTO trade data shows imbalances of over 25 per cent between Gabon's reported log exports and China's reported log imports for 1998 and 2000⁴⁷.

Within the G8 and China, Gabon's main timber markets are China (46 per cent of Gabon's exports) and France (24 per cent).

Ghana: In the early 1990s, research showed that large amounts of UK aid had been diverted into illegal timber operations⁴⁸.

Within the G8 and China, Ghana's main timber markets are Germany (16 per cent), Italy (13 per cent) and France (11 per cent).

Liberia: There are strong links between the timber industry, the arms trade, human rights abuses and regional conflicts². Within the G8 and China, Liberia's main timber markets are China (47 per cent), France (24 per cent) and Italy (12 per cent).

Asia

Burma: Almost half the country's timber exports (some 276,000 cubic metres valued at US\$86 million) were undeclared in 1999³⁰. The illegal trade is mostly carried out by foreign (mainly Chinese and Thai) companies⁴⁰.

Within the G8 and China, Burma's main timber market is China (42 per cent).

China: A logging ban introduced in 1998 drastically reduced domestic supply, and saw a three-fold increase in logging imports. Discrepancies between current demand of around 260 million cubic metres and the documented supply of 140 million cubic metres suggests substantial imports of illegal timber⁴⁹. A large proportion, perhaps the majority of China's exports, derive from wood-based products imported from Russia, South-east Asia and Africa.

Within the G8 countries, China's main timber markets are Japan and the US (33 per cent and 16 per cent of China's timber exports respectively). Its main pulp and paper (39 per cent) and wooden furniture (54 per cent) market is also the US.

Indonesia: it was estimated in the 1990s that 73 per cent of exports were illegal¹⁸. Economic losses due to illegal logging were estimated to be US\$600 million a year in the mid-90s⁵⁰, with an estimated annual illegal cut of 15 million cubic metres⁵¹. In 1994, the government admitted that 84 per cent of concession holders violated logging laws⁵². Legal restrictions have been ignored in order to clear natural forests and establish fast-growing plantations. Villagers have reported being subjected to violence by army and company guards when reporting objections to such forest-clearings⁴³. Forest fires in 1997 and 1998 were started in order to disguise land-clearing and illegal logging activities⁴³.

Forest cover in Indonesia has fallen from 162 million hectares in 1950 to 98 million hectares today⁵³. Since 1996, deforestation appears to have increased to approximately 2 million hectares a year from 1.7 million a year in the 1980s⁵³. Lowland tropical forests are predicted to disappear in Sumatra by 2005 and in Kalimantan by 2010 if current trends continue⁵³. At least 16 million hectares of natural forest have been approved for conversion to plantations, in contravention of legal requirements, while much of that which has already been cleared lies idle⁵³.

Within the G8 and China, Indonesia's main timber markets are Japan (32 per cent), China (17 per cent) while its main pulp and paper market is China (37 per cent). Indonesia's main wooden furniture markets are the US (32 per cent) and Japan (18 per cent).

Malaysia: In 1995, it was reported that about 35 per cent of exports were illegal¹⁷. However, incidences of illegal logging in Malaysia have fallen dramatically since the implementation of the amended National Forest Act, which greatly increased the penalties for such offences⁵⁴. Even so, Malaysia imports illegal timber from Indonesia, then re-exports it: an estimated 1 million cubic metres of stolen timber from West Kalimantan (in Indonesia) enters Sarawak (in Malaysia) every year⁵⁵. The illegal timber trade from East Kalimantan to Sabah, Malaysia, was estimated to have cost the Indonesian government at least US\$580 million in the last decade⁵⁵.

Within the G8 and China, Malaysia's main timber markets are Japan (29 per cent of Malaysia's exports) and China (189 per cent), while its main wooden furniture markets are the US (49 per cent) and Japan (13 per cent).

Papua New Guinea: Between 1994 and 1998, losses in national income due to illegal or fraudulent activities in the forestry sector were estimated to be in the range of US\$180⁵⁶- \$365⁵⁷ million a year. The dominant role in the forestry sector has switched from Japanese to Malaysian companies, whose principal client is China. The Government's 1987 *Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea* found abundant evidence of illegal logging - but the report was suppressed, evidence destroyed and an attempt made on the inspector's life⁵⁸.

Within the G8 and China, Papua New Guinea's main timber markets are Japan (37 per cent) and China (36 per cent).

Thailand: The introduction of a ban on commercial logging in natural forests in 1989⁵⁹ drove the illegal timber trade further underground, with illegally logged timber being smuggled out of Thailand and re-imported with false papers⁶⁰. As a result of this ban, it is also likely that a large proportion of Thailand's official timber exports are sourced from forests in neighbouring countries such as Burma, Cambodia and Laos^{61, 62}.

Within the G8 and China, Thailand's main timber markets are the China (27 per cent), Japan (19 per cent) and the US (14 per cent), while its main pulp and paper market is China (40 per cent). Thailand's main wooden furniture markets within the G8 are the US (51 per cent) and Japan (29 per cent).

Vietnam: Illegal logging of hardwood trees is prevalent in many national parks, with an estimated 1 million cubic metres extracted illegally every year^{63, 64}. Despite a ban on log imports from Cambodia, Vietnam processes illegal Cambodian timber and exports it as garden furniture to Europe⁶⁵.

Within the G8 and China, Vietnam's main timber market is Japan (51 per cent). Its main wooden furniture markets are Japan (25 per cent) and the UK (13 per cent).

Europe

Czech Republic: Despite being designated as a protected area, logging was extended to core areas of Sumava National Park in 1999 and 2000, even though conservationists and forest ecology experts opposed the logging⁶⁶.

Within the G8 and China, the Czech Republic's main timber market is Germany (36 per cent). Its main pulp and paper markets are Germany (36 per cent), Italy (19 per cent) and France (13 per cent).

Estonia: Non-governmental organisations estimate that about 50 per cent of timber felled in Estonian forests is illegal⁶⁷, while the government states that only 2 per cent of all logging is illegal. The government does admit, however, that a lack of resources makes it difficult to reveal all illegal practices⁶⁸. Cheap timber sold at Estonian ports to western European and Scandinavian forest companies helps to encourage the illegal trade⁴⁰. The recent FSC certification of over 1 million hectares of State Forest Service land (50 per cent of its state forests) will start to address this in these forests - but the problem will remain in the private forests.

Within the G8 and China, Estonia's main timber market is the UK (10 per cent).

Latvia: A total of 3,955 incidences of illegal logging, with a logged volume of more than 200,000 cubic metres, were registered in Latvia in 2000⁶⁹. The official estimate states that currently 2-3 per cent of Latvian timber exports are illegal, but present research by environmental NGOs will independently assess the volume and value of illegal logging and illegal timber exports.

The Latvian state forest management company Latvijas Valsts Mezi (LVM) has committed to certify, under the FSC, 1.4 million hectares of forest over the next few years.

Within the G8 and China, Latvia's main timber market is the UK (34 per cent).

Russian Federation: Estimates of illegal logging in Russia range between 20⁷⁰ and 50⁷¹ per cent. Illegal harvesting occurs in all the primary wood-producing areas of the country, including the north-west, southern Siberia and the Caucasus, but particularly in the Far East. The state annually loses more than US\$1 billion due to illegal wood harvesting, processing and trade: the official export of forest products totals US\$3.3 billion and the turnover of forest and paper products is near US\$5 billion¹². Sweden is the third-largest importer of Russian timber and it is estimated that between 25-35 per cent of the Russo-Swedish timber trade originates from illegal logging^{72, 73}. The situation in trade to Finland is marginally better. Illegal timber imported into Scandinavia from Russia is re-exported to the EU and elsewhere, thus making accurate estimations of volumes of illegal timber purchased by G8 countries difficult to calculate: the timber is labelled Finnish or Swedish, even though it was logged in Russia.

Timber from the Russian Far East is exported mainly to China and Japan. In the Krasnoyarski region in the first half of 2001, more than a third of forestry inspections detected violations of forest laws, with damages estimated to be worth 8 billion roubles (US\$25 million)⁷⁴. In 2000, according to official data, exports of timber from Primorye exceeded the official amount cut there by 700,000 cubic metres⁷⁵. Exporters often understate the true weight of exports by as much as 20-50 per cent. This leads to understatement of the volume, thus allowing more timber to be exported than is officially recorded⁷⁵.

Within the G8 and China, Russia's main timber markets are China (16 per cent) and Japan (17 per cent), while its main pulp and paper markets are China (45 per cent) and Germany (14 per cent).

North America

The vast majority of logging in Canada is legal, but apart from serious concerns about sustainability, there are issues of compliance with regulations and ethical matters. One such issue is the loophole surrounding grade setting, which the Sierra Legal Defense Fund estimated was used by logging companies in British Columbia to avoid as much as Can\$149 million in stumpage (or provincial) fees⁷⁶. In an Ontario study, compliance violations of logging guidelines were detected in 55 per cent of areas designated for protection as areas of concern and riparian reserves⁷⁷. Logging licences have been granted by provincial governments on land where tenure is in dispute by First Nations, including in some cases areas where treaties have not yet been negotiated between the First Nations and the federal government.

Within the G8 and China, Canada supplies all countries except Russia.

Appendix II. Estimations and rationale used for the compilation of Table 6

Supplying Country	% Illegal	Rationale
Brazil (tropical)	80%	See appendix 1, 80% relates to natural tropical forests not plantation forests.
Burma	50%	Measured by estimating difference in declared exports by Burma and declared imports from Burma ³¹ .
Cambodia	100%	There is a formal suspension of logging so any production is illegal (Report 379 of the Fafo institute, Oslo, March 2002).
Cameroon	50%	See appendix 1.
China	40%	Timber – Much of its exports probably derive from imports – logging bans in major producer regions within China. China's imports come from Russia 25%, Indonesia 15%, Malaysia 20%, Gabon 5%, Papua New Guinea and Thailand 5%. Illegal percentages 40%, 100%, 35%, 70% and 70% respectively, gives 40% of all imports. Assume timber harvested in China for export does not warrant an increase or decrease in this percentage.
China	20%	Pulp and paper: Imports Indonesia 15%, Russia 10%, % illegal = 100%, 40%. Assume zero wood-based pulp production in China.
Equatorial Guinea	50%	Maximum annual production is exceeded by between 40-60% and maximum concession size are not adhered to.
Estonia	50%	Estonian Green Movement/FoE Estonia (www.roheline.ee/eng).
Finland	5%	Pulp and paper as well as timber; imports from Russia 80%, Estonia 10%. Illegal 20% and 50% respectively. 20% of all imports is illegal. Imports add 30% to local harvest, assumed legal.
Gabon	70%	Only 30% of the total due under the "allocation tax" is recovered. Although accounting for c10% of tax revenues from forestry, the allocation tax is much the largest tax on production. Thus, 70% of timber exports are illegal.
Ghana	60%	FAO Forestry Outlook Study for Africa (www.fao./forestry).
Indonesia	100%	Pulp and paper as well as timber.

Supplying Country	% Illegal	Rationale
Latvia	20%	Official estimate is 2-3%. A new study is currently being undertaken and it is estimated that this figure will be much higher.
Liberia	80%	All logging companies are some way involved in human rights violations and arm conflict (Global Witness pers. Comm.).
Russia (North and West)	20%	Pulp and paper as well as timber (upper range 25-35%).
Russia (Far East)	40%	Pulp and paper as well as timber (upper limit 50%)
Malaysia (Peninsular)	18%	i.e. half level estimated for Borneo as improved law enforcement.
Malaysia (Sarawak and Sabah)	35%	Very little change in law enforcement since original estimate in 1995.
Norway	10%	Pulp and paper as well as timber; imports from Sweden 50%, Russia 10%, Estonia 10%. Illegal 20%, 20% and 50% respectively. Imports add 100% to local harvest, assumed legal.
Papua New Guinea	70%	Thai imports come from Malaysia 60%, Burma 10%, Laos 15%. Assuming these are 35%, 50% and 70% illegal and the rest are legal, 40% of imports are illegal.
South Korea	30%	Having little forest, most of its exports must derive from imports. 10% of its imports come from each of Indonesia and Malaysia, a further 10% from disreputable tropical countries, 15% from Russia and 10% from China. Assuming illegal content of those imports 100%, 35%, 70%, 40% and 40% respectively, 30% of imports are illegal.
Taiwan	45%	Having little forest, most of its exports must derive from imports. 25% of its imports come from each of Indonesia and Malaysia, 15% from China and 5% from Thailand. Assuming illegal content of those imports 100%, 35%, 40% and 70% respectively, 45% of imports are illegal.
Thailand	40%	Most of its exports must derive from imports – logging ban in Thailand's natural forest
Sweden	5%	Pulp and paper as well as timber; imports from Russia 25%, Estonia 15%, Latvia 30%, Lithuania 5% the proportions of illegal imports are 20%, 50%, 20% and 20% respectively. So 20% of imports are illegal. Imports add 30% to local harvest, assumed legal.

APPENDIX III. METHODOLOGY OF TRADE DATA COLLECTION

Data was collected from Eurostat (for EU countries) and from World Trade Atlas (for all other countries). Data was compiled for imports of timber, wood chips, pulp, paper and wooden furniture for the year 2000. The source data has been converted to give RWE volume, the unit of measure for which is cubic metres.

To estimate how much timber each government procures annually, government consumption figures were obtained from the International Monetary Fund's *Financial Statistics Yearbook 1999*. Government consumption figures were expressed as a percentage of Gross Domestic

Product to estimate government purchasing as a percentage of total spending by the country. Then, assuming this percentage of government consumption to be the same across sectors, it was estimated how much of each country's timber consumption and timber imports were procured by government alone. In the absence of official timber and wood product procurement databases, this was deemed the most indicative guide to timber procurement available.

When referred to a billion is a thousand million.

APPENDIX IV. G8 AND CHINA QUESTIONNAIRE

Section A: A single question to confirm WWF trade statistics

Section B: Questions about environmental, social and legal criteria in specification

Q 1 Does the government distinguish between tropical and non-tropical timber in policy terms? Does it encourage or require its contractors to make such a distinction?

Q 2 Does the government have a policy on timber procurement? If so, does it refer to legality, environmental or social conditions at a forest level?

Q 3 Does the government have a "point of contact" on timber purchase policy?

Q 4 How are forest-related clauses in environmental agreements (such as Agenda 21 Ch11, ITTA, the Helsinki or Montreal Agreements) signed by... government being implemented?

Q 5 Is there any guidance or requirement on contractors at times of renewal of contracts to observe governments intentions towards minimising upstream environmental or socially negative impacts upon forests?

Q 6 Are there any border checks to ascertain whether national or international forestry laws are being breached?

Section C: Questions about better purchasing policies

Q 1 If there are no border checks, are there plans to implement these controls?

Q 2 Are certification systems under consideration in order to ensure that timber and other forest products come from legal sources and well managed forests?

Q 3 Are there other plans by... government to ensure that it only uses timber from legal sources and well-managed forests?

Q 4 Does the... government liaise with other governments about best practice for buying wood and other wood products?

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