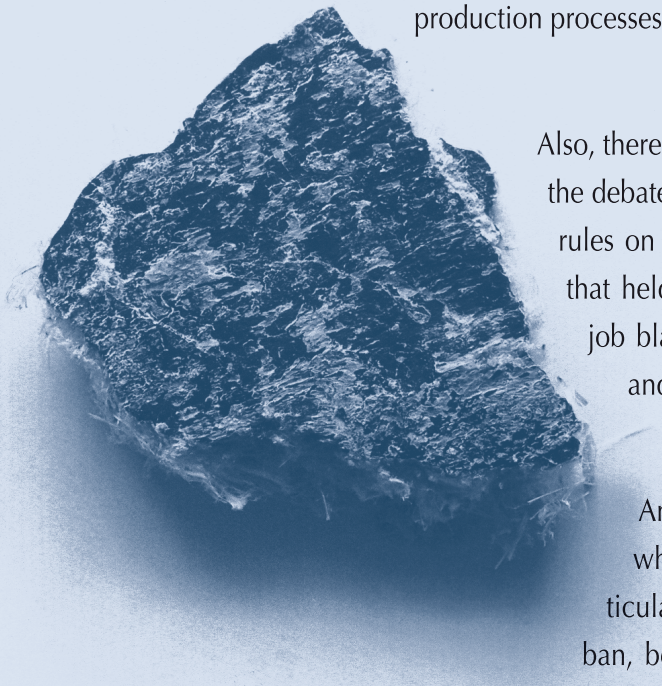
SPECIAL REPORT

Asbestos in the world

Asbestos has been banned throughout the European Union since 1 January 2005. But the joy is tinged with bitterness. Joy at a ban won after a long and difficult struggle by trade unions and victim groups. Bitter, because the time lost in getting to a total asbestos ban still leaves a death sentence hanging over hundreds of thousands of people.

Nor is it the end of the story. The huge quantities of asbestos used in Europe throughout the 20th century will continue to kill tens of thousands of people every year for the next two decades. European Union experts estimate that asbestos-related cancers will cause approximately 500 000 deaths up to the year 2030 in Western Europe alone[1]. Legacy asbestos - especially in waste disposal and building asbestos-stripping operations - puts workers and the community at immense risk. The high cost of these alone should be enough to show up the flaws in industry arguments against replacing carcinogens in production processes.



Also, there are still relevant political lessons to be learned from the debates on asbestos. The drafting of new European Union rules on chemicals (REACH) is meeting the same obstacles that held up the banning of asbestos. Cost arguments and job blackmail still stand in the way of effective workers' and public health protection.

And asbestos is anything but a thing of the past elsewhere in the world. Europe's trade unions have a particular responsibility in the battle for a world asbestos ban, because it is mostly European companies that have developed asbestos production and use. European capital is behind the asbestos mines of Brazil, South Africa, Zimbabwe, Quebec and many other countries. The profits have come back to Europe, leaving deaths and environmental

[1] European Community's first written submission to the WTO Special Group, Geneva, 21 May 1999.

devastation behind. The Turner and Newall and Etex-Eternit groups epitomize the omnipresence of European capital in the asbestos production and using industries. Even today, many European multinationals employ double standards: asbestos-free in Europe, but still using asbestos elsewhere in the world. Waste management also tends to export the death risk to developing countries. Ships laden to the bows with asbestos and other toxic substances regularly ply to Asia, where they are broken up in appalling conditions. This makes solidarity and action by the European labour movement key to the forthcoming battles for a world asbestos ban. ■

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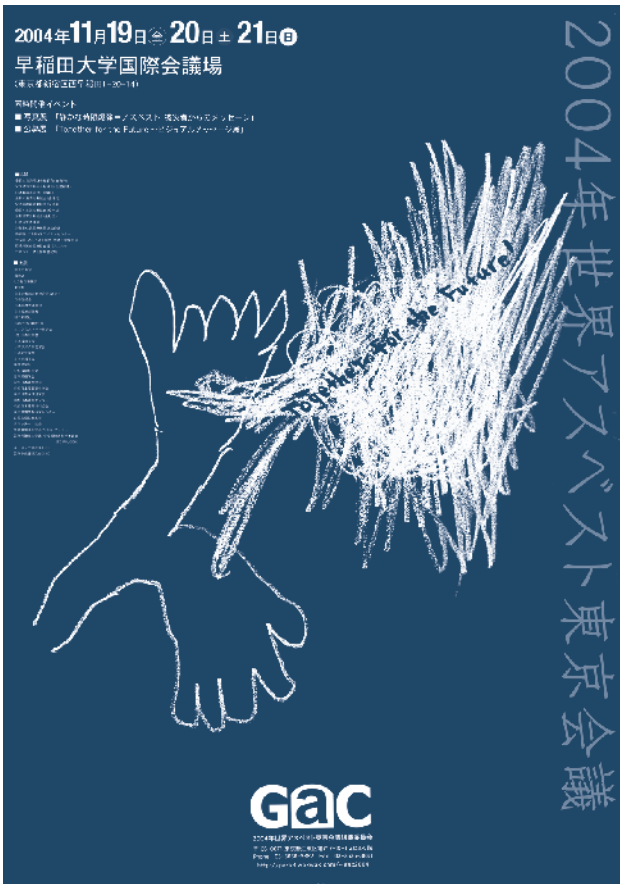

An international conference of scientists, trade unions and victim support organizations from most Asian countries was held in Tokyo in October 2004. The conference documents are available at: http://park3.wakwak.com/~gac2004/en

European asbestos conference

Brussels, European Parliament, 22, and 23 September 2005

The conference is being organised by the European Unitary Left (GUE) parliamentary group and the International Ban Asbestos Secretariat. Its objectives include increasing politicians' (especially MEPs from the new Member States) awareness of asbestos-related problems, exploring options for pressing European multinationals to adopt codes of practice on dealing with asbestos, and examining strategies and planning future initiatives.

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Offloading the risks to Asia

European and international news on asbestos is regularly reported on our special web page:
www.etui-rehs.org/hesa > Main topics > Asbestos.

During the first three quarters of the 20th century, asbestos was mainly produced and consumed in the industrialised countries, the two main production centres being Canada and the former Soviet Union. Over the entire 20th century, these two centres accounted for over two-thirds of world asbestos production[1]. Other industrialised countries were lesser contributors to asbestos output - the United States and Italy in particular (each accounting for approximately 2% of world production in the 20th century) and, to a minor extent, Greece and Australia (about 1% of 20th century world output combined). Asbestos production in dominated countries was relatively low in comparison with these countries' traditional role as raw materials producers. In Africa, asbestos was mainly mined in South Africa and Zimbabwe (about 10% of 20th century world output combined). To these "medium-sized" producers can be added two countries - China and Brazil - where production took off only late on in the closing third of last century (approximately 7% of 20th century world output combined).

Asbestos consumption was also heavily concentrated in the industrialised countries. Only in the final quarter of the 20th century was the almost uninterrupted growth in asbestos demand reversed in this part of the world. The downturn reflected not economic or technical causalities, but mainly labour campaigning against the use of asbestos, long known to be a health disaster [*1*]. Perversely, the extent of the damage in industrialised countries is now being measured only after consumption has been slashed or halted altogether. This is because of the long latency for the development of asbestos-related cancers. Generally, the mortality curve for asbestos-related cancers follows the asbestos consumption curve with a lag of about 30 to 40 years [*2*]. In Europe, the mortality peak will be reached only around 2020, therefore, but differentially by country according to their asbestos consumption curve.

The sharp fall in industrialised country asbestos use produced a global shift in the industry, working to a double standard [*3*]. In industrialised countries, substitutes were found for asbestos in all uses. Even the exception contained in European Union legislation for asbestos filters in chlorine production is actually less of a technical requirement than a political quid pro quo for the German government's support for an asbestos ban in the European Union. In "developing countries", by contrast, asbestos is still played up as an irreplaceable natural resource that it is safe to use in the right conditions. Often, the same industrial group - the Eternit group is a case in point - will diversify its production by country, lining up under the pro-asbestos lobby banner in some parts of the world, while developing less dangerous alternatives in the most developed countries.

A broad brush picture of world asbestos production and consumption reveals the following trends.

The market in Europe is virtually nil with the signal exception of **Russia** which remains the leading world asbestos producer. Asbestos production and marketing started here in the Urals at the start of the 19th century. By the onset of World War I, Russia was the world's second biggest asbestos producer, although well behind Canada. Essentially halted by the world war and civil war, asbestos production took off again from the late 1920s. Modernisation of the rail network enabled the intensive development of the Uralasbest mine. By the late 1930s, Soviet industry had a widely diversified asbestos products industry. In 1975, Soviet Russia overtook Canada as the world's leading asbestos producer, and remains so today.

The early 1990s, however, saw a dramatic collapse in asbestos production from its 1989 peak of 2 600 000 metric tons (approximately 60% of world production) to just 743 000 metric tons in 1996,

Table 1 World asbestos production during the 20th century (metric tons)

Asbestos production	1900	1940	1960	1970	2000	Cumulative during the 20th century
Former Soviet Union	NA	102 000	598 743	1 065 943	983 200	67 100 000
Canada	26 436	313 514	1 014 647	1 507 420	320 000	60 500 000
South Africa	158	24 850	159 540	287 416	18 782	9 920 000
Zimbabwe	NA	50 809	121 529	79 832	145 000	8 690 000
China	NA	20 015	81 647	172 365	370 000	7 700 000
Brazil	--	500	3 538	16 329	170 000	4 540 000
Italy	NA	8 271	59 914	118 536	--	3 860 000
United States	956	18 198	41 026	113 683	5 260	3 280 000
World production	31 587	573 728	2 213 533	3 493 800	2 070 000	174 000 000

NA: data not available / -- : zero

[1] Unless otherwise specified, the economic statistics in this article, including the tables, are taken from the reports by Robert Virta of the US Geological Survey, in particular *Worldwide Asbestos Supply and Consumption Trends from 1900 to 2000*, US Geological Survey, Open-File Report 03-83.

Table 2 **Apparent consumption of asbestos in Europe (metric tons) ***

	1920	1950	1975	1990	2000
Overall consumption in Europe	40 905	506 396	2 697 091	2 582 294	537 302
Former Soviet Union	1 629	136 458	1 286 697	2 151 800	507 125
United Kingdom	21 199	107 606	137 487	15 731	244
Germany	6 828	93 842	378 143	15 084	189
France	445	38 921	136 587	63 571	- 30
Europe (excluding former Soviet Union)	39 276	369 738	1 410 394	430 494	30 277

* Apparent consumption is calculated as national asbestos production plus imports less exports. Negative apparent consumption means that exports (or re-exports) of existing stocks for the year concerned were higher than national production plus imports.

rising back up to around 1 260 000 metric tons in 2003 (900 000 metric tons in the Russian Federation and 360 000 metric tons in Kazakhstan). The fall owed everything to the general upheaval in manufacturing industry and construction, and nothing to occupational health or environmental protection concerns. It was the result of shock therapy from the reintroduction of capitalism. The country's principal asbestos mine (Uralasbest) was privatised, partly sold off to German investors, eventually ending up under the control of new Russian capitalists. It was even declared bankrupt in 1997, only to resume its activities afterwards.

There was virtually no debate on asbestos either under the Soviet regime or since. Following the banning of asbestos in the European Union, the Putin government set up a panel of experts to give an opinion on a possible Russian asbestos ban. The panel mainly consisted of occupational medicine specialists. Its final report is an impassioned defence of asbestos use [*4*]. The Russian press tends to take a jingoistic approach to the asbestos issue. The struggle by world trade unions and victim support groups to get asbestos banned is sometimes portrayed as the product of a trade war waged with "the deep pockets of transnational trusts" [*5*]. The pro-Russian asbestos lobby claim that it holds relatively little danger for health. With the same arguments coming out of Canada, Zimbabwe and Brazil, asbestos victims must count themselves really unlucky not to have been exposed just to these pure national varieties of chrysotile.

The Russian authorities continue to deny the health havoc wrought by asbestos. This rose-tinted view is challenged by the figures from Eastern European countries that imported Soviet asbestos almost exclusively. Szczucin in south-east **Poland** has been the site of a large asbestos cement factory since 1959. The town's population has one of the highest rates of pleural mesothelioma in the world, and 125 times the Polish average. The prevalence of lung and stomach cancer is also very high [*6*]. A recent article in the Russian press voiced concern about the practise of asbestos-using firms handing out production residues to private individuals as filling material, bumping up asbestos pollution of the environment [*7*].

Canada's language divide

The situation on the North American continent is broadly as follows.

Canada was the leading world asbestos producer until 1975, benefiting from its proximity to the main consumer market - the United States. The asbestos mines initially opened by English capital were mainly located in rural Quebec, where low pay and much worse working conditions than in other mining sectors in North America could be imposed. Canadian asbestos production was fated to decline when the United States market all-but disappeared and asbestos demand shrank steadily in the other countries of the American continent.

There is no evident economic reason why Canada continues to produce asbestos. A combination of transport costs and significantly higher labour costs than rival producers put it at a competitive disadvantage on the other markets that are still available. The fact that almost all the production is exported as crude fibres is also at odds with general Canadian mining policy, which is to promote value added by processing raw materials for export [*8*]. Canada is the main purchaser of asbestos-containing manufactured goods from the United States[2]. The cost of these imports is significantly higher than the total value of asbestos production in Canada (estimated at nearly $119 million Canadian in 2001 and approximately $98 million in 2002) [*9*].

Canada therefore remains the prime mover in a world pro-asbestos crusade, but takes great care not to practise what it preaches to others - its own asbestos consumption is very low. Over 95% of its output is exported. No, the real reason behind Canada's asbestos policy and its many inconsistencies is the Quebec national question.

[2] At a cost of US$169 million in 2004. Chiefly brake linings containing asbestos and/or replacement fibres. The figures do not show whether these products were manufactured in the United States or are re-exported.

Two things are key here. The asbestos miners were in the vanguard of the post-WW2 labour struggle, with both labour and national claims. Nationalist ideology effected a sort of transference of the miners' struggles onto the product of their labours. Throwing asbestos production into question would be tantamount to betraying the national cause. But it was a self-contradictory transference in that one part of the asbestos miners' struggle was also against the health havoc wrought by production.

But the asbestos issue also highlights a real problem in Quebec's economic development. The asbestos-mining region is a mono-industry rural zone, which the disappearance of asbestos production could plunge into a deep crisis. Real as this problem is, its solution depends essentially on the ability of labour action to push through industry reconversion policies. It would be naive to believe that allying with Quebec employers to effectively hold the federal authorities to ransom can keep a production going forever which is finding fewer and fewer outlets and is a danger to public health. Asbestos region workers know that they are fighting to keep alive an industry that has killed members of their own family and will have far-reaching consequences in user countries. For asbestos victims, the agonies of the disease are compounded by the obligation of not speaking out against those responsible for it. Mesothelioma sufferers are being asked to keep quiet and die so as not to disrupt the "social partnership" of the pro-asbestos camp.

Canada operates one double standard in practice by exporting almost all its asbestos to countries in Asia and Latin America, and another in regard to protection of workers inside the country. In the English-speaking provinces, trade union action has almost totally eliminated asbestos in all new production.

Quebec's provincial government and national labour unions[3] have an official agenda of boosting asbestos use [*10*]. The nationalist party, the Bloc Québécois, wants asbestos use to be increased Canada-wide, recently tabling a motion in the federal Parliament to that effect [*11*]. In practise, there are a growing number of "buts" and misgivings, while many Quebeckers privately admit that they do not want to see a rise in asbestos-related risks.

This split between Quebec and the English-speaking provinces means that Canadian workers enjoy very different levels of protection. Labour standards in all the English-speaking provinces lay down an exposure limit of 0.1 fibre/cm^3 (as in the European Union), while Quebec Province and federal legislation[4] standards prescribe an OEL of 1 fibre/cm^3. In the English-speaking provinces, therefore, dockers may be exposed to ten times higher levels of asbestos than building workers. In Quebec, all workers are excluded from the most protective standard, which is without doubt a factor in their higher mortality from asbestos-related diseases, especially in the asbestos-using construction and manufacturing industries [*12, 13*].

Environmental pollution from appalling waste management in the mining region and exposures in asbestos-containing buildings is also a growing concern in Quebec [*14*]. High mesothelioma death rates among Quebeckers are partly connected with this pollution and partly with housework-related exposure (wives washing their husband's work clothes, in particular).

United States: a near-ban in 1989 overturned by the courts

The United States was the biggest asbestos user during much of the 20th century in many manufacturing sectors and the construction industry (consuming about 18% of cumulative world asbestos production throughout the century). During the first half of the century, US consumption averaged 62% of world asbestos production. The second half of the century falls into two equal periods. Up to approximately 1975, the US remained one of the largest asbestos consumers; after that, demand slumped.

Table 3 Apparent asbestos consumption in the United States (metric tons)

1900	20 400
1920	153 000
1940	238 000
1950	660 000
1960	643 452
1973	803 000
1980	358 708
1985	162 000
1990	41 000
2000	14 600

The Environmental Protection Agency (EPA) started moving towards an asbestos ban in 1979. Pressure from business circles and the Canadian government pushed the Reagan Administration to act to stop the EPA from putting its plan into practise. In 1984, the issue was transferred to the federal Occupational Safety and Health Agency (OSHA) and the Consumer

[3] Quebec has three kinds of trade union organisation. National unions affiliate to federations and confederations in Quebec Province. Canadian unions organize workers both in Quebec and in the English-speaking provinces. "International" trade unions organise workers throughout Canada and in the United States. Broadly, the national trade unions are anti an asbestos ban, while the Canadian and international unions are pro-ban.

[4] Canada's ten provinces each enact their own labour standards, which apply to the great majority of workers. Federal labour standards apply to federal civil servants, and such sectors as telecommunications, international and inter-province transport (road haulage, railways, forestry forwarding), airports, airlines, banking, uranium mining, etc.

Product Safety Commission (CPSC). With both organisations failing to act, the EPA reclaimed the initiative. It carried out a detailed assessment of the health threats posed by all forms of asbestos, and then in July 1989 enacted a regulation outlawing most asbestos-containing products [*15*]. That regulation was overturned by a federal Court of Appeal in 1991 [*16*].

Since then, trade unions and environmental groups have continued to fight for an asbestos ban. With the federal government singing from the employers' song-sheet, this seems unlikely anytime soon. But the huge cost of damages won by asbestos victims has deterred most sectors of the economy from continuing to work with asbestos. Halliburton - a name familiar to the public from its role in Iraq and being headed by current US vice-president Dick Cheney - is a case in point. It is facing 300 000 law suits from asbestos victims claiming damages in excess of $4 billion.

Overall, asbestos use has shrunk to relatively marginal levels. From its 1973 peak of over 800 000 metric tons, it fell to around 40 000 metric tons in 1990, just under 15 000 metric tons in 2000, and 3 000 metric tons in 2004.

Latin America: standstill in Brazil

As asbestos use declined in the United States, there was a discernible shifting of the risks to **Mexico**. From the 1970s, Mexico had as it were helped the US transition towards (nearly) asbestos-free production by manufacturing asbestos-containing products for its northern neighbour [*17*]. This partly explains the doubling of asbestos consumption in Mexico between 1970 (40 000 metric tons) and 1980 (79 000 metric tons).

Mexico's asbestos-using manufacturing base is characterized by extreme disaggregation of businesses, rendering any control nigh-impossible. In 2001, Mexico had 1 881 asbestos-importing firms, many of them subsidiaries or subcontractors of US companies. From the 1990s, however, Mexican exports of asbestos-containing products began to diversify. In 1992, the US was almost the only export market (96%). By 2000, 58% of asbestos-containing exports still went to the United States, but 40% were to Central American countries and Cuba. This trend is likely to have continued. Having all-but eliminated asbestos in its own manufacturing production, the US is gradually reducing the use of asbestos-containing products in construction (largest traditional user) and its automotive industry (where asbestos was used in the manufacture of brake linings).

The movement to ban asbestos in Latin America has chalked up some signal successes of late. Argentina, Chile, Uruguay and Honduras have all outlawed it. Generally, consumption of asbestos is declining in the other countries, even where it is not actually illegal. But it is a slow, and not necessarily irreversible, trend[5]. So, some sources report rising asbestos consumption in a handful of countries latterly (Mexico, El Salvador and Cuba are sometimes cited), offset by downturns in most other countries.

Brazil is a case apart (see article page 17). The asbestos ban demanded for over ten years by trade unions seemed on the cards in 2003 following the election of President Luiz Inacio da Silva, known as "Lula". So far, the federal government has bowed to pressure from the asbestos lobby. In **Colombia**, the government is in thrall to multinationals, and trade union freedoms are under serious attack, making it hard to speak out about the effects of asbestos. A ban is highly unlikely as things stand. Recent data on asbestos production and consumption in Colombia are patchy[6]. A request to the Colombian Ministry of Mines for precise statistical data has gone unanswered. In Peru, labour unions are pressing for a ban, and have found a resonance among MPs.

Table 4 **Apparent asbestos consumption in different Latin American countries (metric tons)**

	Brazil	Colombia	Cuba	Venezuela	Mexico	Peru	Argentina	El Salvador	Chile
1970	37 710	16 763	NA	10 161	40 460	1 828	21 141	963	8 800
1975	103 778	15 000	NA	15 548	60 395	3 500	16 678	3 866	2 000
1980	195 202	27 057	NA	9 111	79 014	4 870	21 410	3 324	NA
1985	144 789	26 620	1 658	4 669	54 868	3 242	7 108	1 769	NA
1990	163 238	21 437	1 500	1 418	39 316	1 060	6 863	904	7 749
1995	182 129	22 925	3 000	5 012	19 154	4 947	6 088	398	11 666
2000	181 689	12 189	3 000*	2 727	26 880	1 188*	2 333	1 678	1 460

NA: data not available
* Figures for 1999 (no figures available for 2000)

[5] Short-cycle changes are not necessarily significant, since they also reflect swings in the business cycle and, especially construction sector activity.
[6] Virta (Asbestos in *Minerals Yearbook*, 2004) estimates annual asbestos production in Colombia in 2003 and 2004 at 60 000 tons. Colombian sources were unable to confirm this.

Asbestos victims in Egypt: call for international solidarity

Crippled by asbestos and with no pay coming in, 64 sacked Egyptian workers have been occupying the Ura-Misr asbestos-cement water pipe manufacturing plant since November 2004.

That was the month in which the Egyptian government banned any further production or import of any kind of asbestos in Egypt. The ban marks the culmination of three years' struggle by the Ura-Misr workers to get their occupational diseases recognized, and health and safety rules applied in the factory.

The owner of Ura-Misr, Ahmed Loukma, refused to comply with different ministries' enforcement notices, and has had his factory closed down several times since 2002. After the last closure, in September 2004, he stopped paying 52 workers, all sick with asbestos diseases. When the future asbestos ban was announced in November 2004, Ahmed Loukma sacked the 52 workers, plus a further 12, between the end of December and the start of January 2005. The factory is still closed today, and the sacked workers are occupying it to claim their back pay, compensation for health damage, severance pay or to be re-employed in conditions that meet health standards. They are also suing for compensation in the courts.

Their struggle has attracted support from international NGOs and trade unions, including the ETUC. For more information and to support the action, see our website: **www.etui-rehs.org/hesa > News.**

Africa: South Africa leads the way

The asbestos ban in **South Africa** is an outstanding result. For a producer country going through hard economic times to ban asbestos is an encouraging new development. South Africa's workers see the fight against asbestos as inseparable from that against apartheid and the colonial past[7]. Most asbestos mines were opened with English capital. European multinationals were systematically guilty of double standards [*18*] by refusing to apply European-standard prevention measures in their South African sites. In the Penge asbestos mine, exposure levels measured in 1983 were 130-134 fibres/cm^3, or 260 times the limit value of the time in British companies [*19*].

Asbestos production in the Turner and Newall mines in Southern Africa was designed to ensure labour exploitation through a combination of capitalistic production relations and specific attributes of colonial oppression [*20*]. Workers were not employed under individual contracts. The production unit invariably comprised a male worker plus several members of his family (assorted women and children). This family unit had considerable autonomy to organize its work. A guaranteed output was ensured through performance pay. This meant that the women and children generally received no individual wages, and mining industry employment legislation did not apply to these kinds of contract. Up to the 1970s, workers in some mines received part of their wages in the form of vouchers exchangeable for goods in the company-owned store (the "truck" system).

It was mostly manual work. Under apartheid, the works doctors employed by asbestos-producing and -using firms put their employers' business interests before any health concern. Black workers' asbestos-related illnesses were seldom recognised as occupational diseases. Workers were often laid off as soon as they showed signs of breathing disorders. For recognized cases of asbestosis, black workers received much lower compensation than white workers. South Africa now has to deal with the terrible burden of the environmental damage caused by asbestos mining as well as the health damage of exposure on three fronts: at work, at home and from environmental sources.

In **Egypt**, recent labour action succeeded in getting the government to ban asbestos, although one of the groups at the forefront of the fight, the Ura-Misr workers (a former subsidiary of the Spanish company, Uralita), are suffering reprisals from the authorities (see box).

Zimbabwe continues to produce asbestos in a shambolic context of wheeling and dealing [*21*]. The main asbestos mines, located at Shabanie and Mashaba, were owned by Matumwa Mawere, a close business associate of President Mugabe. He is a former World Bank official who bought the mines and asbestos cement companies from the UK company Turner and Newall for a pittance in 1996. The tab for his production losses has been generously picked up by the State. In May 2004, Mawere was arrested in an affluent suburb of Johannesburg in South Africa, reportedly in connection with allegations of corruption. He is also accused of having

[7] The Building Allied Mining and Construction Workers Union (BAMCWU) had been campaigning since 1986 for an asbestos ban in South Africa and neighbouring countries from where many asbestos mineworkers were drawn.

falsified asbestos export figures to avoid having to declare his group's foreign currency holdings [*22*]. The spoils of Matumwa Mawere's fall from grace in the ruling circles of the Mugabe regime have been divided between the rising stars of the Party-State [*23*].

These problems have sidelined occupational health issues. And yet, as far back as the 1980s, seriously worrying data were available on chrysotile asbestos-related cancers among Zimbabwe's miners [*24*]. Every attempt by South African unions to open a debate on these issues was rebuffed by the regime. Asbestos is even used by the government to attack the country's main trade union confederation, which made the mistake of trying to distance itself from the regime. In June 2005, the press accused the ZCTU (Zimbabwe Congress of Trade Unions) General Secretary, Mr. Wellington Chibebe, of having sold out to imperialism by calling for an asbestos ban. He issued an immediate denial and fell back in behind a pro-asbestos line[8].

Elsewhere in Africa, asbestos is still permitted, but, for economic reasons the continent is not a prime market. Estimated asbestos consumption in Africa varies widely depending on the source. Some countries, like Nigeria and Morocco, have no reliable statistical data. But it is certain that Africa is little more than a marginal user on the global asbestos market. The highest estimate, from the Chrysotile Institute, claims 80 000 metric tons of asbestos used in Africa in 2003 (i.e., 4% of the world market); the lowest estimate is under 2% of world consumption, with 20 476 metric tons in 2000[9]. The same source puts that at less than one fifth of Africa's 1985 consumption when asbestos use on the continent peaked at 112 435 metric tons. The banning of asbestos in South Africa seems likely to strengthen the falling trend of consumption in Africa.

In **Oceania**, asbestos has been banned in Australia, and New Zealand has announced its intention to follow suit.

The shift towards Asia

Asia is now the asbestos industry's prime market - it is lobbying hard to avoid a ban there. The Russian Federation and Asia account between them for more than 85% of asbestos consumption. The Chrysotile Institute puts this at 1 730 000 metric tons out of a world consumption of 2 080 000 metric tons in 2003. It has been a sudden change. In 1990, Asia (excluding Russia) accounted for less than a quarter of world asbestos consumption. Five years on, it already accounted for over half.

The Asia-wide situation is one of marked contrasts, however. The **Middle East** is not a very big market for asbestos. Any official ban aside, asbestos consumption is following the same downward trend there as in the industrialised countries. Most uses of asbestos were made illegal in **Japan** in October 2003. Asbestos consumption has declined significantly in South **Korea**[10], **Taiwan** and **Singapore**. Most asbestos-using firms in Taiwan relocated to mainland China, Vietnam and Thailand in the 1990s. Asbestos consumption has recently started to trend downwards in Vietnam, but it is too soon to tell if this is a long-term trend or a reflection of the business cycle[11]. **China**, **Thailand** and the **Indian sub-continent** are where asbestos consumption is tending to rise most sharply.

China has also become a major asbestos ore producer. Conditions in China's asbestos mines are particularly horrendous. There is a large number of small mines in rural areas. Initial sorting and weaving of the fibres was long done by peasants as a side-job at home. The conditions of Chinese asbestos production prompt many questions. There are concurring reports that China's largest asbestos mine is worked by prison labour. In 1995, the celebrated Chinese dissident, Harry Wu, succeeded in photographing the Xinkang mine in a prison camp in the country's south-western Sichuan Province. He reported that most prisoners worked about a fifteen-hour day without protective equipment [*25*]. This information is corroborated by the mine's inclusion in the list

Table 5 **Apparent asbestos consumption in Asia (metric tons)**

	1920	1950	1975	1990	2000
China	--	102	150 00	185 748	410 190
India	1 847	11 160	61 826	118 964	124 516
Thailand	NA	NA	42 521	116 652	120 563
Japan	4 965	12 245	255 551	292 701	98 595
Korea	NA	610	61 303	76 083	28 972
Total consumption in Asia	6 812	25 383	702 351	976 459	861 381

NA: data not available
--: zero

[8] See *The Herald* (Harare), 9 and 10 June 2005.
[9] These figures are for consumption of asbestos ore, and do not include the asbestos-containing manufactured goods. Accurate figures are also lacking for some African countries.
[10] Where asbestos consumption peaked at 2 kg per capita in 1992. It stood at 0.5 kg in 2001 (report by Mr. Domyung Paek, Seoul University, to the Global Asbestos Congress, Tokyo, 2004).
[11] Indonesia's asbestos imports fell slightly between 2001 and 2002, and sharply in 2003; information collected in the early months of the year points to a likely increase in 2004 (report by Zulmiar Yanri, director of occupational safety and health, to the Global Asbestos Congress, Tokyo, 2004).

A worldwide trade union campaign against asbestos

Global Unions kicked off a world campaign to ban the use of asbestos on 8 June 2005 in Geneva. The campaign was announced at the International Labour Organisation's (ILO) annual conference attended by some 4 000 worker, employer and government representatives.

Guy Ryder, General Secretary of the International Confederation of Free Trade Unions (ICFTU) said the campaign would be a country-by-country process aimed at getting a ban on asbestos which continues to kill over 100 000 people a year throughout the world.

Global Unions have delivered a letter to every government attending the ILO conference, asking them to become involved nationally banning asbestos and supporting a world ban on the commercialisation and use of the product.

"Asbestos is a threat to everyone, not just workers. From children in schools, to young and old in private and public buildings where asbestos is present and to whole communities where it exists as a pollutant", said Guy Ryder.

of companies using forced labour drawn up by the US Customs Service in 1992. The Laogai Foundation reports the mine as having an annual output of 30 000 metric tons. The asbestos produced by prison labour is marketed under the Kangyin brand.

Working conditions in Chinese companies are characterised by serious occupational health failings[12]. The lack of free trade unions makes it hard for workers to stand up for their health. The official trade union confederation is a delivery system for the Chinese Communist Party and many new capitalists have come from party leadership circles, their close family members, in-laws and allies. Foreign multinationals have tended to forge alliances with leadership loyalists through mixed ownership companies or subcontracting networks. Some analysts have readily talked of "an institutionalised aversion to worker participation in safety issues" [*26*].

The legislation in force is often inadequate, but still systematically flouted. The health and safety inspectorate is ineffective due to understaffing, poor technical capability, and widespread corruption. A study was done of six categories of occupational hazards in 1990-1991 in 1 438 firms located in fifteen different provinces [*27*]. It found that the rules were being enforced in 41% of workplaces. Wide variations were found by type of risk: for benzene and chromium, most of the workplaces inspected were regulation-compliant. For asbestos, not one of the twelve workplaces inspected was obeying the law! And 24.5% of the workers examined in these workplaces were considered to be suffering from definite or suspected asbestosis (the average rate for all diseases examined for was 15.4%).

There are few epidemiological surveys of occupational lung cancers in China notwithstanding the large numbers of workers exposed to such risks [*28*]. Those that are available, however, point to asbestos becoming a major cause of mortality for the exposed workers. A cohort study of 5 893 workers in eight asbestos-using workplaces found 183 cancer deaths out of a total 496 deaths. That represents a relative risk of 5.3. Another study of workers exposed to chrysotile only observed relative risks of 6.6 for lung cancers and 4.3 for all cancers. Another survey in the textile sector of female former asbestos weavers pointed to lung cancer-specific death rates 3.88 times higher than for the control group [*29*].

This high prevalence of asbestos-related diseases shows that Chinese official figures on occupational diseases have only the most tenuous relationship with reality. In the past forty years, barely 4 300 workers have secured recognition of an asbestos-related occupational disease [*30*]. The Chinese studies are also valuable for once again giving the lie to claims about the relative innocuousness of chrysotile asbestos. The Chinese researchers who have studied asbestos display a more robust independence, attachment to ethical principles and disciplined methodology than researchers of other countries who have collaborated with the asbestos industry.

The situation is certainly no better in **India**, Pakistan and Thailand. India is a small producer but a big user of asbestos. Production is dispersed among many small mines located in rural areas. Production waste is discharged into the environment, contributing to high levels of environmental pollution. Overall, there is an observable correlation between increasing asbestos use and worsening respiratory health in the Indian population [*31*]. **Thailand** now has the highest per capita asbestos consumption. Asbestos imports rose from 90 700 metric tons in 1987 to 181 348 metric tons in 2002. The figures on worker exposure are appalling: the Thai statutory OEL of 5 fibres/cm^3 was exceeded in over 36% of

12 On working conditions in China, see: www.chinalaborwatch.org.

cases surveyed [*32*], and the OEL of 0.1 fibres/cm^3 was exceeded in more than 96% of these cases.

In **Pakistan**, Noor Jehan, a researcher at the University of Peshawar, carried out a systematic analytical study of mesothelioma cases in the North-West frontier province [*33*]. She found 601 cases having occurred between 1995 and 2003. One characteristics of the situation is the very high prevalence of mesothelioma among female homemakers (around 200 cases) and farmers (about 100 cases). This was related to the crude work organisation of asbestos cement manufacture. The asbestos bags, mostly from Canada, are opened in public places or farms without taking the slightest precaution. The fibres may be used in the same mills where flour is ground. They are mixed with cement and water by the whole family. No information is provided about the danger of fibres and the precautions to be taken. Photographs I have seen show work being done in a kind of fog of airborne asbestos fibres.

All the available data for emerging Asian countries for the asbestos market tally - the exposure levels of Asian workers vastly exceed the woefully inadequate standards set by local legislation. In **India**, a study done in informal sector enterprises working with asbestos found exposure levels of 18.2 fibres/cm^3 (more than 180 times the admissible OEL in the European Union) [*34*]. Waste management is virtually unheard-of. The unused asbestos is scattered around villages or densely-populated towns.

A survey in fourteen villages in Jharkhand State, where there is an abandoned asbestos mine, found a high prevalence of respiratory problems [*35*]. It was found that fibre-containing asbestos waste often ran off to other villages downstream from the mining zone in the monsoon season, and in the dry season, warm winds carry fibres across the area.

Some countries (chiefly **Bangladesh** and **India**) have another source of asbestos pollution: shipbreaking of scrap vessels from Europe and North America. The Russian Federation has also recently been found to be exporting asbestos industry waste to India [*36*]. This seems not to betray the greatest confidence in its own claims about the benefits of controlled asbestos use.

The Indian sub-continent, China and Southeast Asia hold more than 40% of the world population. The health impacts of the sharp rise in asbestos consumption will take a relatively long time to filter through. It is a major public health disaster waiting to happen. Arguably, the scale of the disaster will be magnified in Asia by the extremely poor working conditions, residential areas lying cheek by jowl with workplaces resulting in wholesale public exposure, especially babies and infants, and the lack of health surveillance for the immense majority of exposed workers. A race against the clock is now going on in the countries concerned, therefore, where many trade unions and victim support groups have joined forces to try and stave off the disaster. But it is no easy task. Asia's workers rightly expect the labour movement in other parts of the world to act against multinationals and States that are directly or indirectly involved in producing, selling and using this killer fibre. ■

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Asbestos ban: Brazilian government fudges the issue

Brazil is the world's fourth asbestos producer, and the biggest asbestos producer and user in Latin America. Asbestos production started in the 1930s but took off under the military dictatorship. It soared from around 1 000 tonnes in 1965 to 169 000 tonnes in 1980, levelling-off at around 200 000 tonnes in the 1990s.

The Lula government's announcement in March 2004 of an imminent asbestos ban in Brazil had the opposite effect to that intended. A year later, SAMA, the operator of the Minaçu asbestos mine in Goias State put out a triumphant press release announcing an all-time production high. With a total 255 104 tonnes of output over the twelve months to March 2005, it had achieved its highest level since the record books began. While the consensus among economic analysts was that asbestos production in Brazil was in its death throes, current production levels are well above what they were under the military dictatorship and the predecessor governments to the Lula coalition. What lies behind this spectacular turnaround?

A powerful social movement to outlaw asbestos

A wide range of Brazilian organisations had demanded the banning of asbestos, ranging from trade unions through environmental and public health defence organizations to asbestos victim support groups. Production of asbestos and asbestos-containing manufactured goods is a two-tier system: a small handful of companies dominate the sector (in practise, now just Eternit), with a swarm of small and very small companies handling the least profitable and most dangerous work. Historically, the dominant industry presences came from Europe, with the Brussels-based Eternit and Saint-Gobain companies controlling much of the sector, from mining to primary processing, mainly in the form of asbestos-cement. During the production boom under the military dictatorship, it was nigh-impossible to speak out publicly against the damage asbestos was doing to workers' health[1]. Practically, the only exception was Paulo Nogueira Neto, who trailblazed environmental defence in Brazil and

[1] Recent articles in the *O Globo* daily newspaper illustrate how European and US multinationals colluded with the military dictatorships in Brazil and Argentina to crack down on trade unionists and political opponents (José Casado, Empresas ajudaram militares na repressão a sindicalistas, *O Globo*, 15 May 2005; and As empresas e a ditadura argentina, *O Globo*, 16 May 2005).

was the first Secretary of State for the Environment from 1974 to 1986. He first called attention to the dangers of asbestos in 1975, but his warnings were countered by a disinformation campaign run by the employers' organisations. Prior to 1983, there are almost no reported medical studies on asbestos-related diseases: the literature reports fewer than twenty cases, even though asbestos has been used since the early 1930s. In 1983, an occupational health doctor reported 14 cases of asbestosis in a single company. The following years saw a disturbing rise in the number of reported cases.

Asbestos was gradually to become a focus of labour dispute and debate. In 1987, an inter-agency group on asbestos was set up in São Paulo State. Trade unions were to play an important role in it and, with help from labour inspectors, lifted the lid on poor working conditions and widespread health damage in asbestos-using firms[2]. Labour Party (PT) MPs in Rio de Janeiro State have been calling for an asbestos ban since 1993. Brazil's main central labour federation, the Unitary Labour Confederation (CUT), came out in favour of an asbestos ban in 1994. In the same year, motor manufacturing industry trade unions won a tripartite agreement to have asbestos replaced by less dangerous fibres, but the agreement was blocked by a government refusal to ratify it in 1996. In December 1999, the CUT set up a national campaign around the slogan "Asbestos kills. In time". Brazil's other union federations have also lined up behind an asbestos ban.

In 1995, ABREA, the Brazilian Association of People Exposed to Asbestos, was set up in Osasco, a city in the São Paulo industrial belt. The association's membership includes many current and former Eternit workers, and is expanding rapidly in other parts of Brazil. There is also political opposition to asbestos, and bans were declared by municipalities and States in the late 1990s in face of the Cardoso government's failure to act. Most of the prohibitions were prompted by the Labour Party. At state level, the lead was taken by Mato Grosso do Sul State, which outlawed asbestos in January 2001, followed in May and June 2001 by three of the country's most populous States - São Paulo, Rio de Janeiro and Rio Grande do Sul. Pernambuco State brought in banning legislation in May 2004, followed most recently by Mato Grosso State in April 2005, initiated by a female Labour Party MP[3]. Nearly twenty municipalities have also decided to outlaw asbestos use in new building construction, Brazil's biggest metro area, São Paulo, among them in February 2001.

The industry reaction was swift. Most State laws and municipal ordinances were appealed to the federal supreme court, where they were struck down on the grounds of allocation of legislative authority between the federal State and subnational tiers of government. The supreme court's decision is not on the legitimacy of an asbestos ban per se, but the fact that the decision is for the federal authorities to take.

The situation in early 2002 appeared to be stalemated. State asbestos bans looked like dead letters, and the federal government under Fernando Henrique Cardoso was shying away from any initiative. Some government ministries (Health and Environment) favoured an asbestos ban, while the main government coalition party (the PSDB) was largely swayed by asbestos lobby spin. President Cardoso has taken no official line, but his fence-sitting favours the status quo. Brazil's decision to join with Canada in the 1998 WTO proceedings to challenge France's asbestos ban leaves little doubt about where the government's real sympathies lie[4].

Lula's election: all change or more of the same?

Many thought that the election of Luiz Inácio da Silva (Lula) as President of the Republic in October 2002 would lead to an early asbestos ban. The new government, formed in January 2003, included many ministers from the Labour Party, including in the four key ministries for this issue - Labour, Environment, Mines and Health - as well as leaders from the main central labour federation, the CUT. Considerable time was lost during 2003, but there is no evidence to suggest a change of line. At the international conference on asbestos held in Dresden in September 2003, the Brazilian government representative announced, "We are taking work forwards which will lead to an asbestos ban". He had approved the Conference final declaration, recommending a worldwide asbestos ban. It would appear that in "taking work forwards", the objective became somewhat lost to sight. Instead of preparing a responsible and fair transition by coming up with solutions in terms of jobs for asbestos mineworkers, the government sent out a host of conflicting signals.

In March 2004, the government announced a ban on asbestos. Labour Ministry official Ruth Vilela clearly described it as government decision[5]. In June 2004, an interdepartmental committee was set up of representatives from all seven ministries concerned plus the Presidency Civil Office. It was due to give its conclusions on an asbestos ban by the end of 2004.

Out of the blue, the Mines and Energy Ministry decided on 16 July 2004 to set up another committee

[2] Giannasi, F., A atuação Interinstitucional no controle da Exposição ao Asbesto: A Experiência de São Paulo, *Revista Brasileira de Saúde Ocupacional*, vol. 16, n° 63, São Paulo, 1988, p. 73–75 ; and Giannasi, F., As Condições de Utilização do Asbesto nas Indústrias de Fibrocimento do Estado de São Paulo, *op.cit.*, p. 41-50.

[3] Assembléia proíbe amianto em MT, Diário de Cuiabá, 15 April 2005.

[4] See: Asbestos disputes in the WTO: battle won - but not the war, *TUTB Newsletter*, No. 17, June 2001, p. 20-28.

[5] Fernandes, F., Rolli, C., Governo vai banir uso de amianto no pais, *Folha de São Paulo*, 28 March 2004.

to promote the so-called "controlled use" of asbestos. Various organisations, including the National Occupational Health Association, slammed the move as a ploy to slow down the banning of asbestos. The Minister in charge was Dilma Vana Rousseff, the leader of the Labour Party. On 16 August 2004, the National Environment Board moved in the opposite direction to put asbestos on the hazardous waste list[6]. In September 2004, a further deeply negative signal was sent out when the Brazilian government failed to support the inclusion of chrysotile in the list of hazardous chemicals that are subject to the Rotterdam Convention's prior information and consent procedure before being exported[7]. The interdepartmental committee eventually produced a thousand-plus page report in April 2005, evidencing the split between the two views within the government. Labour Minister Ricardo Berzoini (Labour Party) worked for a consensus view right to the end, but was foiled by an alliance of the Minister for Mines (a Labour Party colleague!), and the pro-employer and sometime head of the country's biggest meat producer, Development, Industry and Foreign Trade Minister Luiz Fernando Furlan. This left the President of the Republic with the final say. The "Civil Office", the President's staff of close officials responsible for coordinating action across government departments, has so far hung fire on the matter. This can only favour the status quo, and has been hailed as a victory by the asbestos industry. With good reason…

Money talks

Pressure from asbestos multinationals, mainly the Eternit group[8], and the industry lobby explain much of the Brazilian government's issue-dodging. With help from the Chrysotile Institute (a Canadian organisation funded by the asbestos industry and Canadian government), the asbestos lobby mounted a wide-ranging propaganda campaign of playing down, not to say denying outright, the dangers of asbestos. Also, as per usual when workers' health protection is on the agenda, the employers lobby ran a scare campaign on job losses. Giant hoardings and countless press adverts spun the message that asbestos provided 200 000 jobs in Brazil. What the campaign glossed over was that were asbestos to be banned, the processing industries would easily be able to continue their production with substitute products. As in Quebec, an upsurge of nationalist rhetoric claimed that attacks on asbestos were a disguised attempt to undermine Brazil's national economic development.

The arguments may have been fairly lightweight, but other more persuasive means were also deployed. Through SAMA, the company that runs the Minaçu mine, the Eternit group had "invested" heavily in the Brazilian political world and managed to build up a pro-asbestos lobby within Parliament based mainly on MPs from Goias State, where the mine is situated. The weekly magazine *Epoca* published a report on 7 April 2005 showing how SAMA had funded the recent election campaigns of various Goias State MPs. It is not partisan about the political influence it buys. While former President Fernando Henrique Cardoso's centrist party, the PSDB, came off best with 350 000 *reais* for two candidates[9], the old-school right was not left out (the PFL got just under 200 000 *reais*). Nor did the Labour Party turn down the interested support of the multinational (its candidate received 70 000 *reais*). The Brazilian press was quick to point out the contrast between the financial treatment meted out to Eternit workers suffering from mesothelioma, and the company's open-handedness to political parties. After 22 years' working in Eternit's Osasco factory, where he contracted mesothelioma, Nelson de Oliveira received a payout of just under 25 000 *reais*. When the money came into his account, he had already been dead for two days. Approximately a third of his compensation went to pay for his funeral and headstone.

But the asbestos industries also engaged in systematic harassment of those who speak out against them. Eternit has brought repeated lawsuits against a São Paulo labour inspector, Fernanda Giannasi. While they have all been thrown out, their clear purpose was to browbeat labour inspectorate staff. Fernanda Giannasi's bosses also piled on pressure to pull her off asbestos-using plant inspections[10]. The general political context in Brazil is not currently conducive to an independent and effective labour inspectorate[11]. Their budgets have been slashed, and employers have mounted an assault on the more enterprising inspectors. The murder of three labour inspectors and their driver on 28 January 2004 shows the level of violence that some employers' circles are ready to use against a labour inspectorate that they see as standing in the way of free enterprise (see box p. 21).

"Government falters while society moves on"

Government inertia contrasts with the robust movement in Brazilian society to get asbestos banned. Significantly, the mass circulation *Epoca* weekly magazine published an article on 29 April 2005 titled *Government falters, society moves on*, reporting on the Asbestos Tribunal, a gathering of academics, asbestos victims, trade unionists and political personalities in São Paulo in April 2005. A pro-asbestos

[6] CONAMA Resolution No. 349, *Diário Oficial da União*, 17 August 2004.
[7] See: Chrysotile: Canada undermines Rotterdam Convention, *TUTB Newsletter*, No. 26, December 2004, p. 35. Brazil sided with the Bush administration and abstained.
[8] Eternit's asbestos-cement production-related activities in Brazil generate turnover of some 430 million *reais* a year. Total industry turnover is around 2 billion *reais*. Direct employment in asbestos-cement companies amounts to approximately 5 000 workers. Indirect employment is estimated at about 200 000 workers. (Fernandes, F., Governo adia decisão de banir amianto do país, *Folha de São Paulo*, 20 February 2005).
[9] A *real* is worth approximately 0.33 euros.
[10] See: Kazan-Allen, L., Open Season on Brazil's Labor Inspectors, *International Journal of Occupational and Environmental Health*, Vol. 10, No. 2, 2004, p. 240-241.
[11] The special teams of child labour inspectors were dissolved in November 2004, for example.

press campaign was stopped by the national advertising standards authority as encouraging consumption of a substance known to damage health[12]. All the Brazilian Chrysotile Institute's attempts to challenge the decision were thrown out.

The number of lawsuits against companies that exposed their workers to asbestos are also increasing, and the amounts awarded in damages are acting as a deterrent to some Brazilian employers. A large number of asbestos-using firms are planning to switch over to less harmful substitutes. Most spectacularly, Saint Gobain's Brazilian subsidiary, Brasilit, has gone over entirely to asbestos-free production, investing 100 million *reais* in a factory that manufactures the asbestos substitute, polypropylene, at Jacareí in São Paulo State. The company employs 850 workers and has an annual turnover of some 200 million *reais*[13], or just under half of Eternit's turnover for asbestos-cement production.

Brazilian researchers have developed new processes, in particular for using plant fibres in the production of building materials. In public, Eternit looks set to defend asbestos to the death, but behind the scenes it is not ruling out reconversion. While the general press is filled with its proclamations of steadfast loyalty to asbestos, the specialised economic press reports that Eternit is considering cutting loose from its Minaçu mining subsidiary, SAMA[14], and is preparing to diversify its production[15]. What this adds up to is the conditions for a rapid pull-out from asbestos. The government's indecision is creating widespread uncertainty and obstructing an appropriate switchover that respects asbestos workers' interests, and paves the way for viable, job-creating alternatives.

Some MPs are trying to spur the government to action. Two Green Party MPs, Eduardo Jorge[16] and Fernando Gabeira, have revived a bill to outlaw asbestos first tabled in 1996. It is supported both majority and opposition MPs alike. It is too soon to tell whether it will come onto the statute books. The asbestos lobby has a powerful influence in the Brazilian Parliament. On 17 March 2005, the Speaker of the House, Severino Cavalcanti[17], gave his public backing to the Goias State pro-asbestos group of MPs. Whatever else its merits, the parliamentary debate will compel the country's political leaders to show their hands and force the government to finally take a public stance on the matter.

Exporting the risks to poorer countries

Brazil is currently the fourth world asbestos producer after Russia, China and Canada[18]. Over half Brazil's asbestos production is exported to other countries. Its main markets for this killer fibre are Thailand (28% of export sales), India (21%), Mexico (12%), Indonesia (9%) and Colombia (7%). Working conditions in these countries leave no room for illusion about what good the "controlled use" of asbestos will do. Brazil's policy on asbestos is in some ways akin to Canada's. Asbestos use on the Brazilian home market has fallen sharply in recent years (almost 50% in the six years between 1997 and 2003), while exports have soared, more than doubling in the same period. In 1997, 30% of Brazil's asbestos output was sold abroad. In 2003, that had risen to 60%, while asbestos imports were about a third of what they had been in 1997. While asbestos fibre exports have increased significantly, exports of asbestos-containing manufactured goods have levelled off at 59 million tonnes in 2003 against 60 million tonnes in 1997. In other words, the Brazilian government is pursuing a policy of an international division of labour where the most dangerous activities are transferred to poorer countries. The Brazilian government also refuses to carry out prior information and consent procedures with the public authorities of the countries concerned by asbestos exports, showing how little credence it places in the possibility of controlled asbestos use. For the Lula government to keep up its asbestos production and world exports would be to sacrifice thousands of workers' lives to asbestos industry profits.

But there is another way. Former asbestos producer and exporter South Africa is moving towards a total ban. From being the sixth-largest world asbestos producer in 1997 (with 60 000 tonnes), it cut output to under a quarter in five years to be wound down altogether. This shows that there is no iron law about "once an asbestos producer, always an asbestos producer". ■

	1997	1999	2001	2003
Production	208 447	188 386	172 695	231 117
Imports	38 941	24 049	33 136	11 856
Exports	63 164	49 418	53 919	144 343
Apparent domestic consumption	184 224	147 716	151 912	98 630

Source: Ministério de Minas e Energia, Departamento Nacional de Produção Mineral

[12] Decision 251-04 of the national advertising standards authority prohibiting the campaign run under the slogan "Asbestos – chrysotile. Respecting life – growing Brazil".
[13] Brum, E., Cançado, P., Barrocal, A., Vida e morte pelo amianto, *Epoca*, 7 April 2005, p. 10-13.
[14] Mandl, C., Eternit estuda separa mineração de amianto, *Valor Online*, 3 September 2004.
[15] Mandl, C., Frisch, F., Eternit planeja diversificar productos, *Valor Online*, 1 December 2004.
[16] Eduardo Jorge is a former Labour Party MP who went over to the Green Party after a rift with the Labour Party leadership.
[17] Cavalcanti is a leader of the Progressive Party (PP), a right-wing party.
[18] Brazil, Canada and Kazakhstan's outputs are fairly close. Brazil's place varies between fourth and fifth world producer, according to the year, with around 10% of the mineral market.

Contract killers go after labour inspectors

On 28 January 2004, three labour inspectors and their driver were mown down by hired killers on the Unaí-Buritis road in Minas Gerais State. They were on their way to inspect the working conditions of seasonal bean harvest workers on the region's big farming estates. But they were also actively working against the forced labour and forms of slavery still found in rural Brazil. The slaying was a professional hit.

In July 2004, the federal police arrested the murderers, who admitted to carrying out the contract killing. The man who ordered it, businessman Hugo Pimenta, seemed to have no personal grudge against the murdered inspectors. But the police investigations revealed close links between his road haulage business and large agricultural interests.

In August and September 2004, the police rounded up a number of businessmen. The main suspects behind the organization of the slaying are two brothers: Norberto Mânica, one of Brazil's biggest employers in the bean-growing sector, and Antério Mânica, who is also a local political luminary [a]. In October 2004, despite being held on remand, Antério Mânica managed to get himself elected mayor of Unaí on a PSDB list [b]. According to Pastoral Land Commission Chairman Tomás Balduino, the list also had the backing of José Alencar [c], federal Vice-President and Defence Minister in the Lula government [d]. The examining magistrate's investigations revealed that nearly a dozen businessmen and landowners had contributed to help pay for the killing.

The main agricultural employers' organization in Minas Gerais State is also keeping up its vindictive campaign against the labour inspectorate. In a letter sent to Vice-President José Alencar after the inspectors' murder, the organization complains of "inspection terrorism", and against all the evidence denies the existence of farm slavery in the State [e].

It is no surprise, then, that organizations fighting to ban asbestos in Brazil should take very seriously the many attempts at intimidation and death threats against labour inspector Fernanda Giannasi, who has championed the cause of workers exposed to asbestos.

[a] Dantas, I., PF indicia Mânica por assassinatos em Unaí, *Folha de São Paulo*, 6 August 2004.
[b] Suspeito por morte de fiscais do trabalho se elege em Unaí (MG), *Folha Online*, 4 October 2004.
[c] The Liberal Party's José Alencar owns Brazil's biggest textile group, and has very close links with employers' circles in his home State of Minas Gerais.
[d] José Alencar é conivente com o trabalho escravo, diz dom Tomás, *Folha de São Paulo*, 20 April 2005.
[e] Memorandum of the Farming Federation of Minas Gerais State, 9 July 2004.