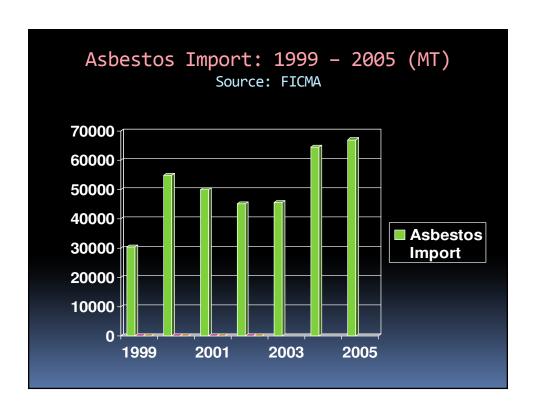
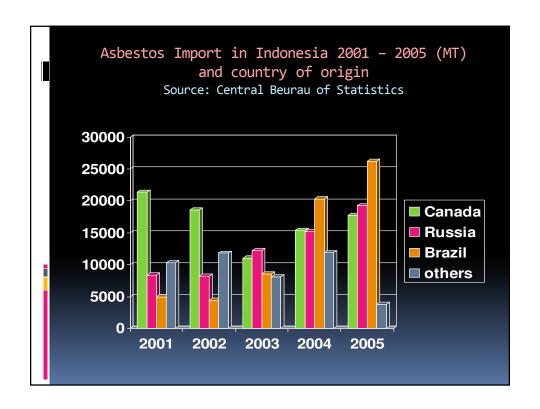


ASBESTOS IN INDONESIA

- Since 1959 Indonesia use chrysotile containing materials, nevertheless untill now never found hazardous to healthy cause of asbestos
- As report from Persahabatan 's hospital, a lot of lung cancer cases and mesothelioma, but no ones related to asbestos
- In indonesia there are about 26 industries with 110.000 employees who finished product containing chrysotile materials.

OF ORIGIN (2001-20	•	1130TILE)	AND COOL	VINIES
COUNTRY ORIGIN	2001	2002	2003	2004(Jan- April)
AFRICA	7.475 Mt	8.570 Mt	6.290 Mt	3.180 Mt
BRAZIL	4.980 Mt	5.336 Mt	5.928 Mt	6.300 Mt
CANADA	21.438 Mt	18.634 Mt	10.420 Mt	4.470 Mt
HUNGARY	133 Mt			
RUSIA	7.686 Mt	10.155 Mt	10.420 Mt	5.300 Mt
POLAND	1.251 Mt	230 Mt	137 Mt	
USA	833 Mt			
OTHER GERMANY, JAPAN, HOLLAN, DCHINA, TAIWAN, TURKEY	1.068 Mt			969 Mt
TOTAL	45.047 Mt	43.087 Mt	33.273 Mt	20.219 Mt





IMPORTED ASBESTOS (CHRYSOTILE)....

■ 2006 : o Mt

■ 2007 : 68.181 Mt

■ 2008 : 103.000 Mt

HIDDEN SOCIAL COSTS

- Roof for the poor
- Earthquake prone area
- Poor health insurance





NATIONAL POLICY FRAMEWORK

Weaknesses in National Policy:

- export & import $\,:$ Min. of Trade

 $\hbox{- environment } \hspace{3mm} : Min. \ of \ Environment \\$

- public health : Min. of Health

- OSH : Min. of Manpower

Lack of coordination

Less harmonized regulations and standards

NATIONAL POLICY FRAMEWORK.....

- Min. of Trade Decree:
 - Asbestos is free to export and import
- Min. of Environment:
 - Re-use of asbestos disposal is allowed
- Min. of Health:
 - -TLV of asbestos in office and industry (5 fibers/cc)
- Min. of Manpower:
 - OSH conditions in using of asbestos
 - TLV of chrysotile (2 fibers/cc)

THE USE OF CHRYSOTILE ASBESTOS AND THEIR PRODUCTS IN INDONESIA

TYPES OF PRODUCT	USE OF CHRYSOTILE TON/YEAR	NO. OF WORKERS
Asbestos Roof	450.000	90.000
Ceiling, Heat Insulation, Con Block	360	590
Brake system, Lining pads	200	4,12
Others	100	389
Total	450.660	90.983

PRODUCTS WITH SAFER SUBSTITUTES

Cement Sheet and Pipe

Vehicle Brakes

Water Storage Tanks

SAFER SUBSTITUTES

- Cellulose fiber-cement
- Polypropylene and Cellulose Fiber-cement
- Bamboo fiber-cement (Taiheyo Cement)
- Other cellulose fibers: eucalyptus, bagasse

Cost + 12-30% more than Asbestos-cement

Safer substitutes.....

- Micro-concrete tiles easily used in rural areas
- Vegetable fibers and asphalt
- Clay roofing tiles
- Galvanized iron roofing (zinc-coated steel)
- Cement reinforced with recycled toothpaste tubes (Brazil)

RECOMMENDATIONS

- Alternative materials for asbestos in made by the same roof manufacturing company can benefits the workers as well as the company and the environmental health
- Protect developing countries from transfer of risk and unfair trade practices
- End double standards
- List chrysotile asbestos in the Rotterdam Convention

RECOMMENDATIONS.....

- Harmonization of national policy and regulations
- Government should give high priority to public and workers' health than short-term economic aspects
- National campaign on asbestos risks, particularly on OSH implementation

