Roadmap to a tobacco epidemic: transnational tobacco companies invade Indonesia

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ABSTRACT

Background Indonesia is the world's fifth largest cigarette market in the world but for decades, transnational tobacco companies (TTCs) have had limited success infiltrating this market, due to their inability to compete in the kretek market. Kreteks are clove/tobacco cigarettes that most Indonesians smoke.

Objective To determine how Phillip Morris International (PMI) and British American Tobacco (BAT) have now successfully achieved a substantial market presence in Indonesia.

Methods We analyzed previously secret, tobacco industry documents, corporate reports on Indonesia operations, the Tobacco Trade press, Indonesia media, and "The *Roadmap*."

Results Internal, corporate documents from BAT and PMI demonstrate that they had known for decades that kreteks are highly carcinogenic. Despite that knowledge, BAT and PMI now own and heavily market these products, as well as new more westernised versions of kreteks. BAT and PMI used their successful basic strategy of keeping cigarettes affordable by maintaining the social responsibility of smoking and opposing smokefree workplace laws but in the 21st century, they added the acquisition of and westernisation of domestic kretek manufacturers as an additional strategy. These acquisitions allowed them to assert influences on health policy in Indonesia and to grow their business under current government policy embodied in the 2007-2020 Roadmap of Tobacco Products Industry and Excise Policy which calls for increased cigarette production by 12% over the next 15 years.

Conclusion PMI and Bat have successfully entered and are expanding their share in the Indonesia cigarette market. Despite the obvious and pervasive influence of the tobacco industry on policy decisions, the Indonesian government should ratify the FCTC and implement effective legislation to reduce tobacco consumption and exposure to tobacco smoke and revise the *Roadmap* to protect future generations of Indonesians.

INTRODUCTION

Indonesia is the world's fourth most populous country with the fifth largest cigarette market, and one-third (34%) of Indonesians smoke tobacco products. Most Indonesian smokers smoke kreteks, hand-rolled or machine-rolled clove-flavoured cigarettes, which account for over 92% of retail sales volume and, like all tobacco products, cause serious diseases and death. Smoking is the cultural norm in Indonesia and plays a central role in social and political systems. In December 2009, Indonesian governmental officials announced intentions to consider ratification of WHO Framework Convention on Tobacco Control (FCTC).

Although a hopeful sign for approximately 57 million Indonesian smokers and the millions of youth targeted by the tobacco industry,⁶ major barriers to effective tobacco control exist in Indonesia.

First, Indonesia's tobacco control legislation is weak on taxation and price, tobacco advertising, promotion and sponsorship, and smoke-free public places. Second, governmental policy protects and promotes the tobacco industry. Third, following the unsuccessful attempts to penetrate the Indonesian tobacco market in the 1990s, transnational tobacco companies (TTCs) have now successfully invaded the country by purchasing domestic kretek manufacturers. This has created a westernisation of the Indonesian tobacco market, with the introduction of new kretek products, such as Marlboro Mix 9 and A-Volution.

To protect the future generations of Indonesia, we must advance understanding of the relationships between the Indonesian tobacco market and the TTCs. By analysing internal tobacco industry documents and public documents, we describe what and when the TTCs knew about the disease effects of Indonesian kretek products that they now own. We also describe the TTCs' successes at growing their Indonesian businesses through strategic acquisitions and transformation of kretek manufacturers and efforts to influence public policy.

METHODS

Primary sources analysed include internal tobacco industry documents produced in response to US litigation settlements, corporate reports to investors relating to Indonesian operations, the tobacco trade press and Indonesian media.

Public accessibility and history of internal tobacco industry documents have been described.8 Online searches of documents produced by British American Tobacco (BAT) and Philip Morris (PM) were conducted on the Legacy Tobacco Documents Digital Library at the University of California, San Francisco website (http://www.legacy.library.ucsf. edu/). Searches of documents dating back to the 1960s were conducted between October 2008 and December 2009. Approximately 1000 documents were identified as relevant and 400 were reviewed in their entirety. Search terms and phrases were combined and included kreteks, INBIFO eugenol, Indonesia, Sampoerna, Bentoel, as well as the names of organisations affiliated with tobacco companies operating in Indonesia. More specific searches using names of company projects, personnel and individuals identified in the documents were conducted. Searching proceeded using

a snowball sampling technique and was completed when the same documents were repeatedly retrieved (ie, saturation). ¹⁰ ¹¹ Limitations of using internal tobacco industry documents as research data have been previously described. ¹² Reporting and interpretation of the *Roadmap* document are based on an unofficial translated version of the document. The *Roadmap* has been mentioned in the trade press (Tobacco International), but it is unavailable at any government website or any publication.

RESULTS

TTCs' knowledge of kretek health risks: what they knew and when they knew it

In the USA in the early 1980s, cases of hemorrhagic pulmonary oedema, pneumonia, bronchitis and haemoptysis associated with kretek smoking were published. 13 In machine testing, carried out at the Intramural Research Program at the National Institute on Drug Abuse, kreteks delivered more nicotine, carbon monoxide and tar than conventional white cigarettes. 14 The Centers for Disease Control determined that kretek smokers inhaled three additional toxic chemical compounds: anethole, coumarin and eugenol. 15 Anethole, a sweet flavouring agent, is a hepatotoxin and carcinogen. 16 Banned in the USA, coumarin is a vanilla-like flavouring used as a pesticide and 'low-tar' cigarette flavourant. 17 Coumarin synthetic derivatives are used in rat poison and anticoagulants. In large doses, coumarin is a carcinogen exhibiting toxic effects on the nervous system, heart, blood vessels and liver. 18 Eugenol is a topical anaesthetic that decreases the harshness of smoke inhalation by numbing oropharyngeal pain receptors. 19

Both Philip Morris International (PMI) and BAT now own Indonesian tobacco companies that market products containing these hazardous additives. ²⁰ ²¹ Of 33 Indonesia kretek brands tested at the Centers for Disease Control in 2007, 10 contained all three compounds, nine contained eugenol and coumarin, three contained eugenol and anethole and 11 contained eugenol only. ¹⁵ Industry documents demonstrate that TTCs understood the health risks associated with kreteks and anethole, ¹² coumarin ¹⁷ and eugenol ⁹ over 20 years ago. While anethole and coumarin have adverse health effects, the main ingredient (other than total particulate matter (TPM)) that is a problem in kreteks is eugenol.

Eugenol

The topical anaesthetic properties of eugenol allow smokers to deeply inhale smoke containing more tar and particulate matter. It Kretek smokers may also smoke slower than white cigarette smokers and take more puffs due to higher tobacco and clove density in the cigarette. In high doses, eugenol is a possible human carcinogen toxic to lung tissue, 22 and intratracheal exposure is more toxic than oral exposure. While the amount of eugenol required to cause adverse health effects in humans is not known, the LD50 for intratracheal exposure in rats is 11 mg/kg body weight. Kretek smokers are exposed to 20–35 mg of eugenol per cigarette. LD50 is the dose of a compound that is lethal to 50% of the rats exposed in a controlled environment.

In the late 1970s, BAT proposed projects to develop cigarettes with various levels of eugenol, but none resulted in product launches. 'Project Citra' was terminated due to public relations concerns stemming from the high level of eugenol in the product and its known toxicity. At a 1983 BAT research conference in Brazil, the company proposed an internal research project to 'assess the pharmacology, biochemistry and toxicology of eugenol...[and] include the possible interaction of nicotine as

a stimulant with eugenol as a depressant'. ¹⁷ By 1987, BAT was well aware of eugenol's health hazards.

There is evidence that eugenol can cause lung injury, including oedema and haemorrhage of the lungs. A BAT consultant on toxicology recorded in 1982 a recollection that high doses of eugenol could cause death in laboratory animals through lung oedema, and an earlier scientific report found lung oedema in dogs given the substance intravenously.²³

A 1985 BAT memorandum stated, '[i]t appears to be accepted that acute illness—pulmonary hemorrhage and edema—can and does occur in some smokers of high clove or clove oil cigarettes'.22 The memorandum also noted, '[i]n animal tests, eugenol is more toxic by the respiratory route than by ingestion'.22 One year later, a BAT scientist noted findings from the USA 'have concluded that eugenol is more toxic by inhalation than by ingestion. There is little or no point in trying to challenge this position—it should be accepted at face value'. 24 In a 1985 memorandum. BAT scientists reacted to an article published on the potential health hazards of eugenol, noting that 'the American Health Foundation have intimated, but not published that in LD₅₀ toxicity tests, eugenol gives a very bad result'. 24 BAT's internal Additives Guidance Panel, which began operating in the 1960s, ¹⁷ advised a maximum of 2 mg eugenol in mainstream smoke per cigarette. In 1987, BAT concluded, 'given usage and cigarette consumption figures in Indonesia, up to 4 mg was permissible in that country alone' with the caveat that 'it should also be emphasized that there is no basis for deriving an acceptable daily intake figure for eugenol inhalation alone'.2

Kreteks TPM

TPM from cigarettes, frequently referred to as tar, is a known carcinogen. 25 Because of flavourants and eugenol's anaesthetic properties, smokers can tolerate higher concentrations of TPM in kreteks than in conventional white cigarettes. In 2002, PM conducted kretek tests at its biological research facility in Germany (INBIFO-Institut für Biologische Forschung), where the company had conducted sensitive smoking and health experiments since the 1970s to reduce the risk of US-based litigation discovering their research linking smoking and cancer.²⁶ PM's studies of two kretek brands (one owned by Sampoerna and one owned by Gudang Garam) and a reference white cigarette reported that 'on an equal tar basis and an equal TPM basis, cytoxicity of the particulate fraction of the smoke for all three cigarettes was the same'. 27 Stated another way, a gram of TPM from a white cigarette is equally toxic as a gram of TPM from a kretek, but kreteks deliver several times more TPM; thus, they are likely more toxic on a kretek to cigarette basis. Despite being only 60%-80% tobacco, Gudang Garam kreteks had four times the TPM (50 mg) of white cigarettes (12 mg) and delivered almost three times as much nicotine (1.8 vs 0.7 mg) in machine smoking conditions.²⁸

TTCs' invasion of Indonesia

TTCs sought to infiltrate the Indonesian tobacco market for decades⁹ but had limited success due to their inability to compete in the kretek market. TTCs encountered substantial barriers from a ban on foreign-owned kretek manufacturing, the political influence and governmental protection of the kretek industry, and difficulties promoting white cigarette products to locals.⁹

However, internal documents disclose progress that TTCs made over the past 20 years in targeting Indonesia's youth^{29–33} and women.³¹ PM's 1990 Indonesia country plan, aimed at

Table 1 PM action plans to pre-empt regulatory restrictions in Indonesia in the early 1990s³⁴

Key policy area	PM's country plan (1990)
Corporate sponsorship activity to 'pre-empt marketing restrictions' (eg, Corporate Social Responsibility)	Develop relationship with the Secretary of State, who sits on the national tennis board.
	Identify reporters from English and Indonesia language newspapers and magazines. Develop these contacts to assist in releasing information regarding the benefits of the tobacco industry and benefits of sponsorship. Publicise PM and industry messages.
	Invite journalists and other opinion leaders to PM-sponsored events throughout the region.
	Institute PM journalism award for best writer in agriculture or agricultural economics as part of the ASEAN-wide competition.
	Conduct and publicise studies on economic impact of the tobacco industry and the economic development benefits derived from non-interventionist government policy.
	Schedule at least one corporate sponsorship event each year.
	Identify and support one charitable group through corporate donations.
Taxation policy	Develop government/legislative contact programme.
	Seek support from leading economists in Indonesia to lend academic credence to our argument.
	Present studies to Ministry of Finance through appropriate intermediaries, and publish abstracts in local business journals.
	Develop plan to exploit mutual interest of white cigarette and kretek manufacturers.
	Develop contacts with business organisations and import/export groups.
	Commission tax study by Centre for Strategic and International Studies or another highly regarded consulting firm like Price Waterhouse. Use the results of study to demonstrate benefits accruing to all manufacturers, and approach Bentoel and the two other leading kretek manufacturers to gain their support. We will also develop a plan to defend against kretek manufacturers working against the interests of white cigarette companies.
Smoke-free policies	Maintain social acceptability of smoking by encouraging tolerance and courtesy and refuting allegations about ETS.

PM, Philip Morris; ASEAN, Association of Southeast Asian Nations; ETS, Environmental Tobacco Smoke.

'pre-empt[ing] possible marketing restrictions through presentation of corporate events/activities, improved media relations, and lobbying efforts', 34 sets out comprehensive plans to undermine tobacco control in key policy areas, such as advertising and sponsorship, taxation and public smoking regulation (table 1). PM's 1990 plan for Indonesia is very similar to its worldwide plan of keeping cigarettes affordable, maintaining market freedom and maintaining the social acceptability of smoking by opposing smoke-free workplace laws. While both BAT and PM maintained this basic strategy in the 21st century, they added the acquisition of and westernisation of domestic kretek manufactures as a way of entering the Indonesian market (table 1).

Despite intense competition and tax policy misalignment, TTCs and domestic kretek manufacturers united to undermine tobacco control health policies. The two Indonesian manufacturing associations are the kretek manufacturers association, GAPPRI (Gabungan Pengusaha Pabrik Rokok Indonesia), and white cigarette producers association, GAPRINDO (Gabungan Produsen Rokok Putih Indonesia). Beginning in 1991, TTCs sought to create a favourable regulatory environment through collaboration with the manufacturing associations. 35 In 1992, the tobacco industry coordinated plans to undermine tobacco control legislation characterising tobacco as an addictive substance. 36 According to BAT's Indonesia company, kretek and white cigarette manufacturers and trade associations decided to 'approach the government institutions to have the possibility to influence the context of the said draft law' and planned to use lobbying documents on addiction supplied by BAT.³⁷ Although internal documents do not disclose further meetings or communications with House of Representatives members, the law (Health Law No 23/1992) did not classify tobacco as an addictive substance.

In 2009, an article defining tobacco as an addictive substance was inserted but subsequently mysteriously deleted from a health bill (Health Law No 36/2009) in the version that left the legislature for presidential signature. ³⁸ ³⁹ After the deletion was publicly disclosed by tobacco control and anticorruption

organisations, the House of Representatives publicly stated that the deletion was due to a technical error and the article was reinserted into the bill prior to the president's signature. 38 39 Media reports indicated that the tobacco industry lobbied against that wording in the bill and that 'the scandalous incident has prompted speculations about collusion between some individual lawmakers or House employees and cigarette companies who had been unsuccessful at having the provision dropped from the bill'. 40 In January 2010, the Honorary Board of the House of Representatives concluded that the missing tobacco clause from the Health Act was not due to an administrative error, alleging that an individual had attempted to remove the clause. 41 The bill, including the clause about tobacco being addictive, was signed by the president and enacted as a national health law on 15 October 2009.

PMI's Sampoerna acquisition

In 2009, PMI became the majority shareholder (97.95%) in the kretek company, Sampoerna, which was the second largest, behind Gudang Garam. Reported as one of the largest foreign investments in Indonesian history,²⁰ PMI's acquisition of Sampoerna for US\$5.2 billion made PMI the market leader within 3 years (figure 1),⁴³ ⁴⁴ realising net earnings of US\$128, US\$249 and US\$268 million in 2005, 2006 and 2007, respectively.⁴⁵ A year after the Sampoerna acquisition, an investment analyst in Jakarta commented that the deal was 'a way for PM to enter a market that it has failed to penetrate in the last three decades'.⁴² Since 2007, PMI increased sales of both white cigarettes and machine-made kreteks by 28%.⁴⁶ Similarly, PMI's market share of the hand-rolled kretek segment has grown.⁴⁷ By June 2009, Sampoerna had 27% of the cigarette market, surpassing Gudang Garam (22%) and Djarum (21%).⁴⁸

PMI product launches targeting new users potentially further increased its market share. In 2007, PMI launched a kretek called *Marlboro Mix* 9^{49} targeting young people⁴ and acquainting them with PMI's global *Marlboro* brand. In 2009, Indonesia's first

Figure 1 Louis C. Camilleri. Chairman and Chief Executive Officer. Morgan Stanley Global Consumer and Retail Conference New York, 19 November 2009. 42 PMI, Philip Morris International; YTD, year to date.



PMI realised net earnings of US\$128, US\$249 and US\$268 million in 2005, 2006 and 2007, respectively.

Source: PMI Morgan Stanley Global Consumer and Retail Conference, 2009.

super slims kretek for women, called *A-Volution*, packaged to resemble a lipstick tube, was launched.⁴⁷ PMI also launched *Marlboro Black Menthol* for young men. Through its Sampoerna purchase, PMI owns a kretek brand family with names that mislead consumers about disease effects of tobacco use such as *A Mild*, which is PMI's second largest brand franchise in Asia behind *Marlboro*.⁴³

Sampoerna had sponsored youth-focused events in the past and, since its purchase by PMI, has continued to sponsor youthfocused music and sporting events, such as the A Mild live production featuring blues singer Alicia Keys. When Ms Keys learned of the PMI sponsorship, she requested that the company's sponsorship and branding be withdrawn, which PMI did, stating, 'Whether tobacco sponsorship of music events leads to youth smoking is a matter of serious debate'. 50 In 2007, 1350 tobacco-sponsored events occurred over 8 months.⁴ Among Indonesian youth surveyed in 2007, 81% had attended at least one tobacco-sponsored event.⁴ In response to questioning about PMI's targeting of Indonesian youth in a 2009 Business Week interview, current PMI CEO Louis Camilleri stated that he would 'tell them exactly what I told my kids and continue to tell my kids, I don't want them to smoke'. While denying the targeting of Indonesian youth, Camilleri also said, 'One of the key consumer engagement theories is brand ambassadors, right? People associate themselves with the attributes of those individuals'. 49 However, in a 2009 ABC Australia documentary, responding to a question about marketing to youth in Indonesia, PMI Indonesia CEO John Gledhill said, 'On a personal level, my conscience is fine, actually. I work for a company which I believe not only follows the law by the letter, but also in the spirit as well'.51

PMI also has direct access to point-of-sale advertising and promotion of brands through Sampoerna's ownership of 1000 Alfamart mini-mart chain stores.⁵² Sampoerna can license its brands to PMI to be manufactured and distributed overseas and,

in return, PMI can license and distribute its products within Indonesia. 53 As a consequence, PMI has an opportunity for growth in kretek imports in Malaysia, Hong Kong, the Middle East and Germany. 54

BAT's Bentoel acquisition

In June 2009, BAT acquired control (85% share) of Bentoel, the fourth largest Indonesian tobacco company, for US\$494 million.²¹ Though Bentoel had only 7% of the market at the time of this acquisition, it experienced a 50% Indonesian volume growth in 2006-2007. By September 2009, BAT bought the remaining Bentoel shares and now owns 99.74% of the company. 55 56 Through the Bentoel purchase and recent merger with its white cigarette manufacturer BAT Indonesia, BAT owns several Indonesian kretek brands. Bentoel's kretek X Mild is marketed as a 'low-tar, low-nicotine' kretek inviting consumers 'to freely express their youth...' ⁵² Launched in 2007, *Bentoel Biru* has hologram packaging targeting Indonesian men.⁵² The handrolled kretek brand Sejati is marketed by 'reward[ing] its [low to middle class] target by giving the feeling of pride out of their hard work'. 52 BAT/Bentoel brands, Tali Jagat Raya (rope of the universe) and Tali Jagat Filter, tap into religious values through advertising campaigns such as 'symbol of hope in surviving life by using the spirit of togetherness' and targets users for 'their resilience and efforts to make tomorrow better than today'.52 Unlike PMI, BAT launched no new brands after acquiring Bentoel. However, like PMI, BAT heavily engages in youthfocused sponsorships (figures 2 and 3).53 One tobacco industry trade journal commentator noted that the acquisition would: '[H]elp BAT...expand in a country where there are few limits on advertising and no restrictions on sales to minors as antismoking rules get stricter in Europe and the US'. 57

When asked about BAT's purchase of Bentoel in 2009, CEO Paul Adams told investors, 'We've now bought a business which gets us into one of the largest markets in the world. It gets us



Figure 2 X Mild Concert Sponsorships. Bentoel Corporate website, 12 January 2010 (http://bentoel.co.id/).

into the kretek segment, which is one of the largest segments of one of the largest markets in the world, so we think it is a very good position...in terms of a platform for future growth. And, that's really why we bought it'.⁵⁴

TTC influence on Indonesian public policies and developments a *Roadmap* to do so

The influence of the tobacco industry on Indonesian health policy is evidenced by two amendments in <4 years of the government Regulation on the Tobacco Control act, in favour of the tobacco industry over the health and safety of Indonesians. The first government Regulation on Tobacco Control (PP No. 81/1999) was amended in less than a year by changing an article prohibiting advertising in electronic media to allow such advertising from 21:30 until 05:00 in a new PP No. 38/2000. ⁵⁸ In 2003, this regulation was amended again by deleting an article regulating 'the maximum allowable tar and nicotine content in cigarettes'. ⁵⁹

Through memberships in GAPPRI and GAPRINDO,⁹ TTCs have gained political access and influence. In 2007, after meeting with GAPPRI and other industry representatives, Industry Minister Fahmi Idris stated, 'we [the Indonesian government] are reluctant to sign the Framework Convention on Tobacco Control because the cigarette industry is able to boost the agricultural sector and paper industry'.⁶⁰



Figure 3 Sejati Concert Sponsorship. Bentoel Corporate website, 12 January 2010 (http://bentoel.co.id/).

PMI and BAT also promote ineffective 'accommodation' measures based on 'courtesy' or 'tolerance' messages, including separate seating for smokers and non-smokers, smoking rooms and ventilation technologies. $^{57}\,$ 61 Through Sampoerna, PMI publicly states support for 'strong and effective regulation of both our products and our industry' to the Indonesian public and policy makers on its corporate website, 62 while simultaneously lobbying for a national law that provides smoking in public places with designated smoking areas. 63 While the TTC's 'support' for regulation is part of a global strategy, the TTCs influence on Indonesian policy is quite remarkable. For example, supported by tobacco manufacturers associations, Indonesian government Ministries released the 2007-2020 Roadmap of Tobacco Products Industry and Excise Policy in 2007.64 65 The Roadmap document aims to increase national revenue, promote employment and improve health through increased cigarette production.⁶ The *Roadmap* calls for a 12% increase in annual cigarette production from 232 billion in 2000 to 260 billion by 2020, at which time, the number of cigarettes produced would be capped. The point of view of the industry is articulated as 'The creation of Tobacco Products Industry which is oriented to the health aspect of the public, as well as the absorption of labor and national income'. The Roadmap prioritises labour and revenue from the years 2007 to 2015 'balanced with health aspects' and prioritises 'health aspects' from 2015 to 2020. It addresses the 'health aspect' through promotion of 'low-tar' cigarettes and tobacco industry 'social responsibility programmes'. The *Roadmap* also calls for industry participation in the drafting of tobacco control legislation. Clearly, tobacco is considered to be economically important to Indonesia. The tobacco industry exploits this in negotiations with government agencies and was able to include tobacco growers as an essential part of the Roadmap. The Roadmap observes that the 'excise revenue is still 1.2% GDP or 5.1% of the national budget' and targets for excise revenue are calculated by observing the national growth of the Tobacco Products Industry.

PMI, through Sampoerna, also engages in youth smoking prevention programmes,66 which have been documented not to reduce youth smoking but to undermine tobacco control. 67 68 Established by Sampoerna in 2001, prior to PMI's purchase of the company, the Sampoerna Foundation has extensively partnered with government, academic institutions and private businesses on national education policy, where a national education leader sits on the Advisory Board of the Foundation.⁶⁹ The foundation provides scholarships for advanced degrees and supports a 'save the teen' initiative, which provides funds for underprivileged children to attend elementary and high school. While the Sampoerna Foundation is a separate entity from PMI, PMI is a major donor. Furthermore, the name Sampoerna is known as a tobacco company name by the Indonesian public. TTCs are engaged in Corporate Social Responsibility sponsorships as they lobby for favourable tax policies; ineffective second-hand smoke control measures; and no restrictions on advertising, promotion and sponsorships. 42 70-74 GAPPRI is currently lobbying the government to refrain from ratifying the FCTC.6

DISCUSSION

Despite decades of failed attempts, TTCs have now successfully penetrated the Indonesian cigarette market by purchasing domestic kretek companies and beginning their westernised transformation. These acquisitions present TTCs an opportunity to grow by targeting new consumers and also provide protection under the government's *Roadmap* policy, which

ensures TTC influence for decades to come. While PMI's strategy of the 1990s for Indonesia was similar to its global strategy for other countries, the ultimate outcome was the *Roadmap*, which shows a level of influence not seen previously in developing countries. In December 2009, the Director of Tobacco and Beverage Industries of the Industry Ministry was quoted as stating, 'In every period [of the Roadmap] the health aspect will always be included in line with the Framework Convention on Tobacco Control (FCTC)'.75 However, measures outlined in the Roadmap to address the health of Indonesians reflect the same tactics that the tobacco industry itself has used in other countries to maintain its business. ^{76–79} The *Roadmap's* proposed initiatives to address the 'health aspect' call for promotion of socalled low-tar cigarettes and tobacco industry social responsibility programmes and for participation of the tobacco industry in the drafting of tobacco control legislation. As occurred in developed tobacco markets such as the USA, the likely end result will be an increase in youth smoking and more tobacco-related illness and deaths.

Just as the TTCs have known for over 50 years that white cigarettes cause serious diseases and death, 80 they have known for decades that kreteks are highly carcinogenic and, despite that knowledge, they now own and promote these products. BAT and PMI internally recognised that kreteks are not only laden with more TPM but that toxic eugenol facilitates inhalation of tobacco smoke. It is unclear from the company's documents why they would be sufficiently concerned about the potential toxicity of kreteks to invest extensive resources in cytotoxicity and mutagenicity testing. Nonetheless, their own internal studies, including PMI's comparisons of two brands of kreteks and white cigarettes, showed kreteks to be even more toxic. Independent researchers have shown that kreteks have several times the TPM of white cigarettes. Thus, on a cigarette-tocigarette basis, kreteks likely produce more harm. However, all cigarettes are extremely deadly and we do not imply that white cigarettes are somehow safer than kreteks. No such comparison of the disease load produced by each product has ever been performed.

Policy measures embodied in the FCTC are aimed at reducing demand for tobacco by implementing effective legislation in the areas of taxation and price; smoke-free public places; and tobacco advertising, promotion and sponsorship, among others. However, Indonesia has not ratified the FCTC. In December 2009, the head of the Minister of Health's legal division publicly stated that the government would discuss FCTC ratification, and the bill was prioritised by the House of Representatives. The Health Ministry has planned to revise 2003 Government Regulations on the Protection of Human Health Against Cigarettes. The Ministry of Health has also committed to receive input from health advocates regarding Indonesia's efforts to ratify the

What this paper adds

This paper provides new insight into the success of PMI and BAT in establishing their companies in Indonesia, one of the largest cigarette markets in the world. They accomplished this by using their well-known strategies, but with more than the usual collusion with the government. In addition, they bought into the kretek market by purchasing existing kretek manufacturers, despite the internal research knowledge of the toxicity of these cigarettes.

FCTC. 83 However, the *Roadmap* measures do not comply with provisions in the FCTC and FCTC guidelines. 81 84

The Indonesian government should be commended for its consideration of FCTC ratification. However, the obvious and pervasive influence of the tobacco industry on policy decisions is a major barrier to FCTC implementation. The Indonesian government should ratify the FCTC, adopt and implement effective legislation to reduce tobacco consumption and exposure to tobacco smoke and revise the *Roadmap* to protect future generations of Indonesians from tobacco-related death and disability.

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REFERENCES

- Republic of Indonesia Ministry of Health. The Tobacco Source Book: Data to Support a National Tobacco Control Strategy. Jakarta: Republic of Indonesia Ministry of Health. 2004.
- Achadi A, Soerojo W, Barber S. The relevance and prospects of advancing tobacco control in Indonesia. Health Policy 2005;72:333—49.
- Brinson B. A Good Match: Sampoerna Continues to Thrive Following its Acquisition by Philip Morris. Raleigh, NC: Tobacco Reporter, 2008.
- Nichter M, Padmawati S, Danardono M, et al. Reading culture for tobacco advertisements in Indonesia. Tob Control 2009;18:98—107.
- Prameshwari P. Cheers as Indonesia Gets Serious on Smoking. Jakarta, Indonesia: The Jakarta Globe, 2009.
- Barber S, Adioetomo SM, Ahsan A, et al. Tobacco Economics in Indonesia. Paris: International Union Against Tuberculosis and Lung Disease, 2008. http://www.tobaccofreecenter.org/files/pdfs/en/Indonesia_Tobacco_Economics_full_en.pdf (accessed 12 Dec 2009).
- World Health Organization. WHO Report on the Global Tobacco Epidemic, 2009. http://www.who.int/tobacco (accessed 10 Jan 2010).
- Barber S, Ahsan A. The tobacco excise system in Indonesia: hindering effective tobacco control for health. J Public Health Policy 2009;20:208—25.
- Lawrence S, Collin J. Competing with kreteks: transnational tobacco companies, globalisation, and Indonesia. *Tob Control* 2004;13(Suppl 2):ii96—103.
- Bero L. Implications of the tobacco industry documents for public health and policy. *Annu Rev Public Health* 2003;24:267

 –88.
- Carter SM. Tobacco document research reporting. Tob Control 2005;14:368—76.
- World Health Organization. Tobacco Company Strategies to Undermine Tobacco Control Activities at the World Health Organization: The Report of the Committee of Experts on Tobacco Industry Documents. 2000. http://www.repositories.cdlib.org/tc/ whotcp/WH07 (accessed 4 Nov 2007).
- 3. Guidotti TL, Laing L. Clove cigarettes. West J Med 1992;156:537—8.
- Malson JL, Lee EM, Murty R, et al. Clove cigarettes smoking: biochemical, physiological, and subjective effects. Pharmacol Biochem Behav 2003;74:739—45.
- Polzin GM, Stanfill SB, Brown CR, et al. Determination of eugenol, anethole, and coumarin in the mainstream cigarette smoke of Indonesian clove cigarettes. Food Chem Toxicol 2007;45:1948—53.
- Caldwell J, Sutton J, Howes A. Nutritional modulations of xenobiotic metabolism. *J Nat Biochem* 1990;1:396–409.
- Glantz SA, Slade GJ, Bero LA, et al. The Cigarette Papers. Berkeley: University of California Press. 1996.
- Givel M. A comparison of US and Norwegian regulation of coumarin in tobacco products. *Tob Control* 2003;12:401—5.
- Anon. Evaluation of the health hazard of clove cigarettes. Council of Scientific Affairs. *JAMA* 1988;260:3641—4.
- Tuinstra T. A New Chapter: Sampoerna's Corporate Affairs Director, Andrew White, Evaluates the Progress Made Since Philip Morris' 2005 Acquisition: Tobacco Reporter, 2007. http://www.tobaccoreporter.com/home.php?id=119&cid=4&article_id=10351 (accessed 3 Jan 2010).
- British American Tobacco. News Release: British American Tobacco Acquires Control of Indonesia's Bentoel. 2009. http://www.bat.com/group/sites/ UK_3MNFEN.nsf/vwPagesWebLive/D07T3LEJ?opendocument&SKN=1 (accessed 9 Jan 2010).

- IARC Monograph. Evaluation of Carcinogenic Risk of Chemicals to Humans. vol. 36. Lyon, France: International Agency for Research on Cancer, 1985. http://www.monographs.iarc.fr/ENG/Monographs/vol36/volume36.pdf.
- 23. **Mitchell T.** Status of Eugenol and its Use in Cigarette Products Position and Recommendations—May 26, 1987. 1987 http://www.legacy.library.ucsf.edu/tid/aug/2a/9
- Mitchell T. Strictly Confidential Clove-Containing Cigarettes, 1986. http://www.legacy.library.ucsf.edu/tid/zml77a99.
- Schick S, Glantz SA. Philip Morris toxicological experiments with fresh sidestream smoke: more toxic than mainstream smoke. *Tob Control* 2005:14:396—404.
- Ciresi M, Walburn R, Sutton T. Decades of deceit: document discovery in the Minnesota tobacco litigation. William Mitchell Law Rev 1999;25:477—566.
- INBIFO. Chemical Composition, in Vitro Cytotoxicity, and in Vitro Mutagenicity of Two Kretek Brands. Executive Summary. 2002. http://www.legacy.library.ucsf.edu/tid/ dag77c00.
- INBIFO. In Vitro Mutagenicity of Total Particulate Matter in Mainstream Smoke from 2 Kretek Market Cigarettes and from the Reference Cigarette 2R4F Salmonella typhimurium Reverse Mutation Assay Project Kretek (PT). 2002. http://www.legacy. library.ucsf.edu/tid/bag77c00.
- Fincher N. Re: Philip Morris Research. Survey Research Indonesia (SRI), 1988 http://www.legacy.library.ucsf.edu/tid/ngy32e00.
- Survey Research Indonesia. Draft Discussion Guide, 1988. http://www.legacy. library.ucsf.edu/tid/ogy32e00.
- Survey Research Indonesia. Presentation of Findings Qualitative Project. Evaluation of Suitability of Four Brands for Indonesian Market, 1988. http://www.legacy.library.ucsf.edu/tid/cey32e00.
- Dabholkar S. Research Questions—Marlboro/New Brand, 1988. http://www.legacy.library.ucsf.edu/tid/zgy32e00.
- Philip Morris. Longbeach—Indonesia January 1998 CPC Submission. Bates No.: 2078637907/7923 [Chart], 1998. http://www.legacy.library.ucsf.edu/tid/qgq70c00.
- Philip Morris. PM Asia Corporate Affairs Plan 900000—920000, 1990—1992. http://www.legacy.library.ucsf.edu/tid/lil19e00.
- Sugianto G. "Letter from Gin Sugianto to Sharon Boyse Regarding Agreement Between White Cigarette Association and Kretek Association", 1991. http://www.legacy.library.ucsf.edu/tid/oky87a99.
- Sardjono D. Press Coverage of Cipollone Case, 1992. http://www.legacy.library. ucsf.edu/tid/cky87a99.
- Sardjono D. Indonesian Forthcoming Law on Health, 1992. http://www.legacy. library.ucsf.edu/tid/wjy87a99.
- Jakarta Globe. House Must Restore Smoking Clause to Health Bill, 2009. http://www.thejakartaglobe.com/editorials/house-must-restore-smoking-clause-to-health-bill/335874 (accessed 5 Nov 2009).
- TEMPO Interactive. Health Commission Re-elect Previous Chairman Amid Tobacco Scandal, 2009. http://www.tempointeractive.com/hg/nasional/2009/10/22/ brk,20091022-203971,uk.html (accessed 4 Nov 2009).
- The Jakarta Post. Lawmakers the Butt of the Joke in the Tobacco War, 2009. http://www.thejakartapost.com/news/2009/10/16/lawmakers-butt-joke-tobacco-war.html (accessed 2 Nov 2009).
- Harian Septar Indonesia. BK Concludes Missing Clause Case. http://www.seputar-indonesia.com/edisicetak/index.php (accessed 29 Jan 2010).
- 42. Parsons N. In for the long haul. Asiamoney 2006;17:54-6.
- Philip Morris International. 2008 Annual Report. http://www.investors. philipmorrisinternational.com/phoenix.zhtml?c=146476&p=irol-reportsannual (accessed 3 Mar 2009)
- Philip Morris International. Morgan Stanley Global Consumer and Retail Conference. New York City, USA, 2008. http://www.pmi.com/eng/media_center/ speeches_and_presentations/documents/FINAL_1118-800am_MS_DISTRIB UTION_REMARKS[1].pdf (accessed 3 Mar 2009).
- Altria. 2008 Annual Report Information Statement, 2008. http://investor.altria.com/ phoenix.zhtml?c=808558p=irol-reportsannual@src=search&q=information% 20statement%202008 (accessed 3 Nov 2009).
- Euromonitor International (database online). Cigarettes. Indonesia. London, c2009.
- Hanjaya Mandala Sampoerna. Investing for the Future: 2008 Annual Report. http://samwebsvr.sampoerna.com/Download/Financials/AR2007_Eng.pdf (accessed 4 Jan 2010)
- Jakarta Post. BAT Buys Bentoel to Challenge Big Three Market Domination. Jakarta, Indonesia: The Jakarta Post, 2009. http://www.thejakartapost.com/news/2009/06/ 18/bat-buys-bentoel-challenge-big-three-market-domination.html.
- Byrnes N, Balfour F. Philip Morris' Global Race. New York, NY: Business Week, 2009. http://www.businessweek.com/print/magazine/content/09_18/ b4129038611856.htm (accessed 4 Jan 2010).
- USA Today. Alicia Keys Snuffs Out Cigarette Branding from Indonesian Show. USA Today, 2008.
- Thompson C. 80 Million a Day, 2009. ABC Foreign Correspondent. http://www.abc. net.au/foreign/content/2009/s2673564.htm (accessed 9 Feb 2010).
- Bentoel. Our Brands. http://bentoel.co.id/our-business/marketing/brand/ (accessed 9 Jan 2010).
- Bentoel Corporate Website. Photographs of X-Mild and Sejati Music Concert Sponsorship. Jakarta, Indonesia. http://www.bentoel.co.id (accessed 12 Jan 2010).

- 54. **British American Tobacco.** Paul Adams Vodcast. Half Year Results, 2009. http://www.w3.cantos.com/09/british_-907-01zi0/interviews.php?type=video&interviewee=18url=http://w3.cantos.com/cantos/dyn/click/cli/a.504/s.57921887/pc.bats-d035/i.4/cf.eJzTN7DUTyrKLMkszojXtTQw1zUwrMo00AcAUwwGuQ==/cs.cf80d84eb90deb22b4fadf6cbf18e969/bb.wm (accessed 9 Jan 2010).
- British American Tobacco. Interim Management Statement for the Nine Months Ended 30 Sept 2009. http://www.bat.com/group/sites/uk__3mnfen.nsf/ vwPagesWebLive/D07XBECD/\$FILE/medMD7XBEPX.pdf?openelement (accessed 12 Jan 2010)
- Mitchell H. Bentoel and BAT. Tobacco Asia, 2011. http://www.tobaccoasia.com/ previous-issues/features/64-articles-q1-10/213-bentoel-and-bat.html.
- 57. **British American Tobacco.** Public Places Smoking. http://www.bat.com/group/sites/UK__3MNFEN.nsf/vwPagesWebLive/D06HADSB?opendocument&SKN=1 (accessed 9 Jan 2010).
- President of the Republic of Indonesia. Government Regulation of the Republic of Indonesia Number 38 of 2000, 2000. http://www.tobaccocontrollaws.org/files/live/ Indonesia/Indonesia%20-%20PP%20No.%2038%20of%202000.pdf (accessed 2 Jun 2011)
- Achadi A. A National Seminar: Update of Tobacco Control Research in Indonesia. Yogyakarta, 2007.
- GAPPRI. Power Point Presentation on the Hearing of Indonesian Parliament (Comission VI) with GAPPRI and APTI on November 18, 2009.
- 61. Philip Morris International. Regulating Public Smoking. http://www.pmi.com/eng/tobacco_regulation/regulating_tobacco/pages/public_place_smoking.aspx (accessed 9 Jan 2010).
- 62. **Sampoerna.** Tobacco Regulation. http://samwebsvr.sampoerna.com/default.asp? language=English@page=environtment (accessed 9 Jan 2010).
- 63. **Sampoerna.** Regulating Public Smoking Sampoerna. http://samwebsvr.sampoerna. com/content/english/environtment/tobacco/regulating/default.asp (accessed 9 Jan 2010)
- Department of Industrial Affairs, Department of Finance, Department of Health, et al. Translation of 2007—2020 Roadmap of the Tobacco Products Industry and Excise Policy. Jakarta, 2007.
- Reuters. Indonesia Plans to Cap Cigarette Output by 2010. 2007. http://www.reuters.com/article/2007/06/19/idUSJAK116372 (accessed 13 Nov 2009).
- Mitchell H. The Pressure Mounts on Indonesia Tobacco. Tobacco Asia, 2009. http:// www.tobaccoasia.com/features/161-the-pressure-mounts-on-indonesian-tobacco (accessed 9 Feb 2010).
- Landman A, Ling PM, Glantz SA. Tobacco industry youth smoking prevention programs: protecting the industry and hurting tobacco control. Am J Public Health 2002;02:917—30
- Assunta M, Chapman S. Industry sponsored youth smoking prevention programme in Malaysia: a case study in duplicity. *Tob Control* 2004;13(Suppl 2):ii37—42.
- Putera Sampoerna Foundation. Website. http://www.sampoernafoundation.org/ component/option, com frontpage/Itemid, en/,1/lang (accessed 30 Jan 2010).
- Philip Morris International. Charitable Donations, 2008. http://www.philipmorrisinternational.com/global/downloads/Cl/List%20of%20charitable% 20contributions%202008.pdf (accessed 9 Jan 2010).
- Sampoerna Foundation. Annual Report 2008. http://www.sampoernafoundation. org/content/view/1260/294/lang, en (accessed 5 Jan 2010).
- Bentoel Internasional Investama. Annual Report 2007. http://www.bentoel.co.id/ pdf/Annual%20Report%202007.pdf (accessed 9 Jan 2010).
- Bentoel. PR/Activities. [English translation]. http://www.bentoel.co.id (accessed 9 Jan 2010).
- Bentoel. Social Responsibility. [English translation]. http://www.bentoel.co.id (accessed 9 Jan 2010).
- ANTARA News (Jakarta). Govt to Limit Cigarette Production, 2009. http://www.antara. co.id/en/news/1260192033/govt-to-limit-cigarette-production (accessed 9 Jan 2010).
- Hurt RD, Robertson CR. Prying open the door to the cigarette industry's secrets about nicotine: the Minnesota Tobacco Trial. JAMA 1998;280:1173—81.
- Smith KE, Gilmore AB, Fooks G, et al. Tobacco industry attempts to undermine Article 5.3 and the "good governance" trap. Tob Control 2009;18:509—11.
- Hirschhorn N. Corporate social responsibility and the tobacco industry: hope or hype? *Tob Control* 2004;13:124—34.
- Yang JS, Malone RE. "Working to shape what society's expectations of us should be": Philip Morris's societal alignment strategy. Tob Control 2008;17:391—8.
- 80. **United States v. Philip Morris USA**, et al. 449 F.Supp.2d 1 (D.D.C. 2006), aff'd in part, vacated in part, and remanded, 566 F.3d 1095 (D.C.Cir. 2009). United States District Court for the District of Columbia. http://www.usdoj.gov/civil/cases/tobacco2/amended%20opinion.pdf (accessed 2 Oct 2008).
- World Health Organization. Framework Convention on Tobacco Control (FCTC). Website Compiling FCTC Guidelines. http://www.who.int/fctc/guidelines/en (accessed 10 Jan 2010).
- World Health Organization. Parties to the WHO Framework Convention on Tobacco Control. http://www.who.int/fctc/signatories_parties/en/index.html (accessed 10 .lan 2010)
- Sinar Harapan. Minister of Health Requests Inputs From NGO in FCTC Ratification. [English Translation]. 2009. http://www.sinarharapan.co.id/cetak/berita/read/depkesminta-masukan-lsm-untuk-pengesahan-fctc (accessed 9 Jan 2010).
- World Health Organization. Framework Convention on Tobacco Control. Art. 5.3;
 Art. 11(1)(a); Art. 13(2); Art. 13(4)(a). http://www.who.int/fctc/text_download/en/index.html (accessed 10 Jan 2010).



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