

HHS Public Access

Author manuscript *Tob Control.* Author manuscript; available in PMC 2022 November 01.

Published in final edited form as:

Tob Control. 2021 November; 30(E1): e10-e19. doi:10.1136/tobaccocontrol-2020-056058.

Successful countering of tobacco industry efforts to overturn Thailand's ENDS ban

Roengrudee Patanavanich^{1,2}, Stanton Glantz¹

¹Center for Tobacco Control Research and Education, University of California, San Francisco, California, USA

²Department of Community Medicine, Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand

Abstract

Background—After Thailand enacted laws to ban the import and sale of all types of electronic nicotine delivery systems (ENDS, including e-cigarettes and heated tobacco products (HTPs)) in 2015, pro-ENDS advocacy groups pressured the government to lift the ban, particularly after Philip Morris International (PMI) started promoting its HTP IQOS in 2017.

Methods—We reviewed information related to ENDS in Thailand between 2014 and 2019 from Thai newspaper articles, meeting minutes and letters submitted to government agencies, websites and social media platforms of pro-ENDS networks and Thai tobacco control organisations.

Results—The tobacco industry and the pro-ENDS groups used five tactics to try to reverse the Thai ban on ENDS: creating front groups, lobbying decision-makers, running public relations campaigns, seeking to discredit tobacco control advocates and funding pro-tobacco harm reduction research. ENDS Cigarette Smoking Thailand (ECST), a pro-ENDS group in Thailand, worked in parallel with Philip Morris Thailand Limited (PMTL) to oppose the ban. The group connected with international coalitions that promote harm reduction through the PMI-funded Foundation for a Smoke-Free World.

Conclusion—Although ECST and PMTL continuously worked to revoke the ban since 2017, the government still kept ENDS illegal as of October 2020. This decision resulted from the strong commitment and collaboration among Thai tobacco control organisations and their shared vision to protect the public's health from harmful tobacco products. The linkages between the

Correspondence to: Professor Stanton Glantz, Center for Tobacco Control Research and Education, University of California, San Francisco, San Francisco, CA 94143-1390, USA; Stanton.Glantz@sonic.net.

Contributors RP developed the idea for the study, collected the data and wrote the first draft of the manuscript. SG assisted with revising and refining the manuscript.

Competing interests RP was a deputy director of Tobacco Control Research and Knowledge Management Center from September 2018 to April 2019 and worked for Thai Health Promotion Foundation from September 2015 to April 2017.

Patient consent for publication Not required.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

pro-ENDS movement in Thailand and the tobacco companies could inform health advocates and policy-makers in other low and middle income countries facing pressure to market ENDS.

INTRODUCTION

Electronic nicotine delivery systems (ENDS) were introduced in 2004, entered the Europe and the USA in 2006–2007¹ and Thailand in 2010.² When ENDS were first introduced, the pro-vaping movement to influence policies consisted of ENDS users and retailers working independently of transnational tobacco companies (TTCs).³ By 2014, the tobacco companies started selling ENDS and these ENDS advocacy groups had amalgamated with TTCs and tactics used to undermine government's tobacco regulatory efforts resembled the tobacco industry (TI) playbook that promoted combustible cigarettes.³

Thailand was among 25 countries that had banned the sale of ENDS as of October 2016.⁴ Unlike the situation in countries where e-cigarettes were marketed legally and ENDS advocacy coalitions worked to block ENDS regulations,³ in Thailand and countries that do not allow legal sale of ENDS, ENDS advocacy groups must revoke this prohibition.

In May 2020, the International Union Against Tuberculosis and Lung Disease (The Union) supported ENDS bans, particularly in low and middle income countries (LMICs), 'In an abundance of caution, the sale of these products [e-cigarettes and HTP] should be banned in LMICs; similarly, they should not be manufactured, imported or exported and should also be subject to TAPS (Tobacco Advertising, Promotion, and Sponsorship) bans and smokefree legislations'.⁵ This paper uses Thailand to address the two questions: (1) What are tactics that the TI and pro-ENDS advocacy groups have employed to pressure the government to overturn the ENDS ban? (2) How has public health successfully countered these tactics?

METHODS

We retrieved news relevant to ENDS between January 2014 and November 2019 from iQNews-Clip, a newspaper database covering over 30 Thai newspapers (Thai and English languages) through the Mahidol University Library e-database service using English and Thai keyword 'บุหรี่ไฟฟ้า' (e-cigarette: defined as all ENDS in Thailand) and the names of relevant actors beginning with 'Philip Morris' (PM), ENDS Cigarette Smoking Thailand (ECST) and ECST's members. We reviewed all posts from ECST's Facebook page from when the page was created (October 2014) to November 2019. We then did snowball searches of relevant reports, online information from websites and social media platforms (LINE, Facebook and Twitter) of Thai pro-ENDS and tobacco control groups.

Searches were conducted from October 2019 to November 2019. Results were grouped into five domains of TI tactics (creating front groups, using public relation to promote ENDS, lobbying decision-makers, seeking to discredit tobacco control advocates and funding research to promote ENDS), which were adapted from the eight domains suggested by WHO⁶ and Fox *et al.*⁷

There were 1108 newspaper articles related to e-cigarettes in Thailand between January 2014 and November 2019. There were 1112 posts on ECST's Facebook page between October 2014 (when the page was created) and November 2019.

RESULTS

Regulation of ENDS in Thailand

All ENDS are called 'e-cigarettes' in Thailand, which include 'liquid e-cigarettes' and 'dry e-cigarettes' (heated tobacco products (HTPs)). Beginning in 2010, major media outlets reported widespread sale of liquid e-cigarettes on the internet and teen use, which raised concerns among the Thai government, tobacco control communities and parents.²⁸ The survey of e-cigarette use among Thai teens in 2015 found 5.4% of youth (7.7% of boys and 3% of girls) aged 13–15 years had tried e-cigarettes and 3.3% (4.7% of boys and 1.9% of girls) were current (past 30-day) users.⁹ Current use was high compared with other countries (eg, Mexico: 1%¹⁰; China: 1.2%¹¹ and Greece: 2.8%).¹² As of August 2020, no subsequent survey of e-cigarette use among youth in Thailand has been conducted.

Liquid e-cigarettes do not contain tobacco leaf so were not tobacco products under Thailand's 1992 Tobacco Products Control Act (TPCA),¹³ leaving their legal status unclear.¹⁴ In 2011, the Ministry of Public Health (MOPH) Bureau of Tobacco Control (BOT) planned to expand the definition of tobacco products to any products that contained nicotine in a proposed new TPCA,¹³¹⁵ which the TI was opposing.

In early 2014, BOT started working with the Ministry of Commerce (MOC) to issue an administrative order prohibiting importing ENDS and the Office of the Consumer Protection Board (OCPB) to issue an order banning sales. Progress was slow until the prime minister expressed concern about ENDS in a speech during the 'Return Happiness to the People Programme' in August 2014¹⁶ because he saw many teens using them. MOC responded¹⁷ with strong support from BOT's legal team in December 2014, issuing a ministerial notification under the Export and Import of Goods Act prohibiting import of hookahs, electronic hookahs and e-cigarettes.¹⁸¹⁹ Violators faced up to a 10-year jail sentence and a fine five times the price of imported goods.¹⁹ In February 2015, OCPB issued an order banning ENDS sales.²⁰ Violators faced up to 5 years in jail and a fine up to 500 000 THB (US\$16 500).²⁰

Parliament approved the new TPCA in 2016 that defined ENDS as tobacco products, which prevented their use in public areas where conventional cigarettes were prohibited.²¹

Thai tobacco control organisations

Major tobacco control nongovernmental organizations (NGOs) in Thailand that oppose ENDS are Action on Smoking and Health Thailand (ASH), Thai Health Promotion Foundation (ThaiHealth) and Tobacco Control Research and Knowledge Management Centre (TRC) (a tobacco research grant-making organisations and knowledge hub established in 2005 and funded by ThaiHealth).²²²³ ASH monitors the pro-ENDS network, plans communication media, informs policy-makers and disseminates information on the adverse effects of ENDS to the public. TRC funds research on e-cigarettes and distributes

findings to NGOs. ThaiHealth is a government-supervised funding agency whose board is chaired by the prime minister.²⁴ Tobacco control is one of ThaiHealth's priorities.²⁵ ThaiHealth provides funding and technical support to ASH, TRC and other tobacco control organisations, and runs antitobacco mass media communication campaigns.

TI tactics

Thai pro-ENDS organisations—Shortly after the new TCPA took effect in early 2017, ECST, the only pro-ENDS group in Thailand that appeared in Thai media and newspapers, and PMI's Thai subsidiary PM Thailand started campaigning against the ban.²⁶²⁷

In 2019, ECST claimed it represented more than 400 000 Thai ENDS users²⁸ while denying any relationship with the TI.²⁹ In 2017, however, ECST partnered with international ENDS advocacy networks,³⁰ including the International Network of Nicotine Consumer Organisations (INNCO), which describes itself as 'represent[ing] consumers of low-risk, alternative nicotine products and to promote Tobacco Harm Reduction on the global stage'.³¹ Asa Saligupta, ECST's director, was on the INNCO board.³²

INNCO, established in 2017, has relationships with other pro-ENDS advocacy groups and industry-funded organisations. The US Consumer Advocates for Smoke-free Alternatives Association (CASAA) is a founding member of INNCO.³³ Julie Woessner, INNCO's president, was CASAA's president (2014-2018³⁴). At least two former CASAA board members, Brad Rodu (2014–2015)³⁵³⁶ and Carl Phillips (2012–2014),³⁵³⁷ had been funded by US Smokeless Tobacco, British American Tobacco (BAT), PM or RJ Reynolds. 33839 Several CASAA advisors worked with tobacco companies, including Riccardo Polosa, who received funding from PMI and its Foundation for a Smoke-Free World (FSFW) and consulted for BAT.⁴⁰ Gregory Conley, CASAA's advisor and former legislative director, is a research fellow at the Heartland Institute and president of the American Vaping Association (AVA); both organisations have been linked to the TI and fought US tobacco and e-cigarette control.³⁴¹ In 1999, Heartland's president wrote PM requesting \$30 000 for operational support, 'Heartland does many things that benefit Philip Morris' bottom line, things that no other organization does...'.⁴² Heartland received money from Altria, PM's owner, in 2011, and annually from 2013 to 2016.⁴¹ AVA was sponsored by many e-cigarette companies, including NicOuid, AltSmoke, Hoosier E-cig and Smokeless Image.⁴³ INNCO received a 2018 \$100 000 grant from FSFW.⁴⁴⁴⁵ Recognising INNCO's longstanding ties to the TI, the WHO rejected its petition for observer status to the Eighth Conference of the Parties of the Framework Convention on Tobacco Control (FCTC) in 2018.⁴⁶

Using public relations to promote ENDS—ECST used Facebook as its primary platform to connect with ENDS users in Thailand. (In 2018, Bangkok was the city with the most active Facebook accounts and Thailand ranked eighth globally in Facebook users.⁴⁷) ECST's Facebook page 'What is E-cig' was created in October 2014⁴⁸ and by 2019 had 85 000 followers.⁴⁹⁵⁰ It presented five themes: (1) sharing ECST's activities such as meeting with policy-makers and attending public events, (2) sharing selected news promoting ENDS, (3) disseminating research findings promoting ENDS, (4) countering information on the

adverse effects of ENDS provided by the tobacco control community and (5) broadcasting on Facebook live to communicate with their followers.

PMI prominently promoted ENDS in Thailand. In December, 2016, the Thai newspaper, Krungthep Turakij, reported the launch of PMI's HTP IQOS in the UK.⁵¹ Two weeks later, the PMI Thailand director of corporate affairs took Thai reporters to visit tobacco plantations in Nan province and briefed them about PMI's new 'reduced-risk products'.⁵² In March 2017, he announced PMI's new English-language website (pmi.com) to provide information on IQOS, claiming IQOS was less harmful than combustible cigarettes.²⁶ PMI Thailand also proposed working with the Thai government to reach PMI's 'smoke-free society' goal,²⁶ which was part of PMI's IQOS marketing campaign.⁵³⁵⁴ Coincidentally, in June 2017, PMI Asia's president announced plans to launch IQOS in more Asian countries based on its success in Japan and Korea because more than 60% of smokers worldwide were in Asia.⁵⁵ Between 2017 and 2019, at least 10 Thai newspapers (Thai and English languages) wrote about PMI's 'reduced risk' products and messages from PMI's representatives (online supplemental table S1). Common messages ECST and PMI used promoted ENDS as 'less harmful', 'effective smoking cessation' and 'no impact on youth smoking'.

Lobbying decision-makers—Between 2017 and 2019, ECST and PMI Thailand lobbied government to lift the ENDS ban (table 1). These activities violated TPCA section 35, which prohibits any lobbying activities and sponsorships by the industry that could affect tobacco control policy, advertise tobacco products or promote consumption.²¹ The industry succeeded with non-health government agencies, including the Ministry of Finance's Excise Department, Ministry of Commerce Department of Foreign Trade, Ministry of Sport and Tourism, and National Legislative Assembly, which tried to get the import ban reconsidered.

Seeking to discredit tobacco control advocates—ECST employed standard industry tactics in efforts to discredit tobacco control researchers and advocates and undermine policy-relevant research^{56–61}: criticise tobacco control advocates in the press, attack advocates on its Facebook page, submit complaint letters against tobacco control researchers to government agencies and use third parties, including physicians and researchers to attack tobacco control advocates' claims^{2862–69} (online supplemental table S2). For example, ECST launched a campaign 'We don't accept TRC' on Change.org to discredit TRC and oppose it leading a study on the appropriate ENDS control policy for Thailand.⁶³

Funding research to promote ENDS—There were at least six conferences during 2017–2019 to promote ENDS in Thailand that included speakers with relationships to the TI (online supplemental table S3). In 2019, the University of the Thai Chamber of Commerce and Rangsit University, two private universities, accepted undisclosed grants from PMI Impact, a global PMI initiative nominally established to combat illegal tobacco trade.⁷⁰ Coincidentally, in March 2019, Rangsit University held a seminar on 'Illicit Economy, Law, and ENDS'.⁷¹ We do not know if this event was sponsored by the TI, but the topic aligned with the PMI grant. Both founders of ECST, Asa Saligupta and Maris Karanyawat, spoke at the seminar.⁷¹ Aunkung Lim, a professor in economics with a long relationship with ECST who received research funding from PM in 2006, was another speaker.⁷² The seminar

rarely discussed illicit tobacco products, and instead focused on the disadvantages of the ENDS ban and concluded with a recommendation to the government that it withdraw ban and regulate them.⁷³ Following the seminar, BOT warned the universities that accepting TI research grants could violate the TPCA, and both stopped accepting PMI funding.⁷⁰

The Foundation for a Smoke-Free World—The establishment of FSFW in 2017 fueled a strong connection among pro-ENDS networks globally. The 2018 FSFW's tax return listed 28 grantees in 13 countries,⁴⁴⁴⁵ including several with additional tobacco links. For example, INNCO's members included 31 pro-e-cigarette organisations in 28 countries, including ECST in Thailand.³³ Knowledge Action Change Limited (KAC), another FSFW grantee, organised the Global Forum on Nicotine (GFN), the annual global conference of pro-ENDS researchers and advocates, with most speakers from industry-l inked harm reduction and ENDS organisations.⁷⁴ ECST and INCCO were regular participants of GFN. Asa Salipgupta, ECST's director, spoke at GFN in 2018 and 2019.⁷⁵⁷⁶ In September 2018, FSFW launched its 'Tobacco Transformation Index' to measure tobacco companies' shift from conventional cigarettes towards so-called smoke-free products^{77–79} (ie, IQOS and other HTPs).

In July 2019, FSFW planned to hold 'smoke-free dialogues' in Thailand.⁸⁰⁸¹ In response, ASH, TRC, WHO, Thai Health Professionals Alliance Against Tobacco and the Global Centre for Good Governance in Tobacco Control held a press conference to expose the relationship between FSFW and PMI and argue that the workshop was a PMI tactic to promote IQOS.⁸² They convinced all invitees not to participate and advised the government to employ its authority to block the workshop because it violated TPCA section 35 and FCTC Article 5.3.⁸² The workshop was cancelled.⁸³ PMI issued a press release to Thai newspapers claiming it was not involved in any FSFW's activities.⁸⁴

DISCUSSION

Thailand has been dealing with the TI's tactics since the 1980s; dealing with the TI's past tactics has strengthened Thai tobacco control communities and allowed them to anticipate the activities of pro-ENDS groups. First, the industry attempted to establish their business in Thailand through joint ventures and licensing agreements,⁸⁵ sports sponsorship and monitoring smuggling cigarettes.⁸⁶⁸⁷ The industry prevailed in 1990 when the United States used the General Agreement on Tariffs and Trade to force open the Thai market.⁸⁸ Since then, the industry kept interfering Thai tobacco control policy to maximise their market shares such as preventing ingredient disclosure,⁸⁹ interfering with scientific research,⁹⁰ challenging plain packs,⁹¹ using trade treaties to pressure the government,⁹² funding allies and support groups,²² and delaying tobacco control legislation.²²

Similar to these earlier battles since market opening in 1992, the 'money' ministries remained important TI allies. Building on experience from these earlier battles, government health authorities and advocates successfully defended Thailand's ban on ENDS despite pressure from the industry and its allies by educating the public and policy-makers on ENDS' dangers and actively exposing the links between PMI and the nominally independent pro-ENDS organisation, ECST (table 2).

The Thai government prohibited ENDS before they were widely marketed. This situation differed from the USA and several countries that allowed ENDS, but was somewhat similar to Australia where ENDS could only be imported for personal use, and not sold or marketed. As a result, rather than working to block the enactment of regulations to control ENDS, the Thai vaping advocacy network worked to overturn the existing ban (similar to the Australian Tobacco Harm Reduction Association, which has a close link with the vaping industry).⁹³ ECST began campaigning against the Thai ban in early 2017, the same time PMI began promoting IQOS in Thailand. Since then, ECST worked in parallel with PMI to promote ENDS legalisation. Although it denied any financial relationship with the tobacco industry, ECST was linked to PMI through INNCO and FSFW.⁴⁴

Legalising ENDS could also boost PMI's market shares in Thailand over the Tobacco Authority of Thailand (TOAT, the state-run Tobacco Monopoly), which had not yet engaged in ENDS business because of concern over the ENDS legislation.⁹⁴ Between 2010 and 2017, the domestic market shares of TOAT and PMI were steady (62%–68% for TOAT and 25%– 29% for PMI).⁹⁵ PMI's share has doubled since 2017 as a result of the change in cigarette excise tax structure.⁹² If PMI manages to legalise ENDS, it could dominate the Thai market.

Claims frequently used by ECST and PMI in efforts to persuade the Thai government and public to revoke the ENDS ban resembled claims pro-ENDS advocacy groups used elsewhere, including that ENDS provide harm reduction and promote cigarette cessation.³ Both ECST and PMI aggressively promoted Public Health England's statement that ecigarettes are 95% less harmful than combustible cigarettes⁹⁶⁹⁷ that is based on a paper by Nutt and colleagues⁹⁸ that has been heavily discredited by the public health community.⁹⁹¹⁰⁰ This study was supported by Euroswiss Health and Lega Italiana Anti Fumo,⁹⁸ whose chief scientific advisor, Riccardo Polosa, was a tobacco industry grantee and consultant,¹⁰¹¹⁰² and coauthor of the Nutt paper.⁹⁸ Karl Fagerstrom, another coauthor, was an advisory board of Swedish Match tobacco company and received consulting fees from Nicoventures, BAT's ecigarette company,¹⁰³ partly for lobbying the Australia on the benefits of e-cigarettes.¹⁰²¹⁰⁴ ECST and PMI's reliance on the discredited 95% figure suggest that they had no real evidence to back their reduced risk claims.

The tobacco industry's use of third parties to discredit its opponents is not new.^{57–60} For example, PM's 1995 'Action Plan: Scientists' said, 'We must not only watch [scientists and researchers], we must react publicly. When appropriate, we must raise the issue of their credibility and their integrity. We must also become more proactive, utilizing credible third parties more effectively'.⁵⁶⁵⁹ ECST employed this strategy to attack TRC's credibility and pressure the government to not have TRC coordinate ENDS policy research for the government's decision on whether to repeal the ban. ECST also used well-known doctors and researchers, including a former professor in medicine at Siriraj Medical School, Thailand's oldest medical school, to boost its credibility and attack its opponents. TTCs' reliance on renowned people and organisations had also occurred in Thailand a decade ago when PM established a connection with the Chulabhorn Research Institute, a WHO collaborating centre in environmental toxicology in Thailand to influence public perception about the risk of second-hand smoke.⁹⁰ This tactic was also recommended by BAT's Project Viking, which worked to counter pressure for smoke-free environments by 'find[ing] a

sympathetic doctor who can be demonstrated to take a largely independent stance [and advocate for the industry position]'.¹⁰⁵

Non-health government agencies and ministries remain susceptible to the tobacco industry in Thailand. Only MOPH adopted an Article 5.3 code of conduct under TPCA.¹⁰⁶ Non-health government agencies accepted ECST as a consumer group and held meetings to discuss ECST's requests and allowed it to participate in formal and informal discussions. The link between ECST and PMI confirms that actions taken by ECST and PMI to intervene in the ENDS ban violated TPCA section 35 and FCTC Article 5.3. Health authorities in the Thai government need to instruct these agencies to implement Article 5.3 just as they promptly responded to have the University of the Thai Chamber of Commerce and Rangsit University withdraw the funding from PMI when they received evidence from tobacco control advocates.

As of March 2020, 29 countries had banned the sale of liquid e-cigarettes, 6 banned the sale of nicotine-containing liquid e-cigarettes,¹⁰⁷ and at least 7 countries banned the sale of HTPs.¹⁰⁸¹⁰⁹ Although prior research indicates that countries with e-cigarette bans have lower prevalence of awareness, trail and current use than countries that allow marketing and sales of e-cigarettes,¹⁰ e-cigarette awareness is likely to increase, particularly among young people.¹¹⁰

India banned all types of e-cigarettes, including HTPs, in September 2019.¹⁰⁸ Not surprisingly, pro-ENDS groups responded immediately. Plume Vapour and Woke Vapours, two e-cigarette importers, challenged the law before the Indian High Court.¹⁰⁸ Samrat Chowdhery, Association of Vapers India and INNCO's Vice President,³³ argued that the law should exclude personal use.¹¹¹ Because of the strong commitment to ban ENDS, Parliament approved the Prohibition of Electronic Cigarettes Act in December 2019.¹¹²

In July 2020, Australia tightened its ENDS regulation that previously allowed the product for personal use to ban import of all ENDS and nicotine-containing refills unless on prescription from a doctor.¹¹³ Pro-ENDS groups responded against the ban immediately with a 'Legalise Vaping Australia' campaign that made arguments similar to those in Thailand¹¹⁴¹¹⁵ and the health minister postponed the ban for 6 months.¹¹⁶

Lessons learnt from the tobacco industry tactics on manipulating regulatory frameworks to enhance ENDS markets in Thailand can inform public health efforts in other countries to defend current policies that make ENDS illegal, particularly by illuminating how the tobacco companies use third parties, often tied to the FSFW, to mobilise public pressure to open the market to ENDS. Understanding these networks has become even more important since April 2019, when the US Food and Drug Administration (FDA) misapplied the public health standard in the US law and authorised PM to market IQOS in the USA.¹¹⁷ PMI then started using FDA's marketing authorisation, including quoting FDA's Centre for Tobacco Products, director Mitch Zeller, to advertise that FDA had determined that IQOS was 'appropriate for the protection of the public health'.¹¹⁷ This situation was aggravated in July 2020, when the FDA authorised PM to advertise that IQOS reduces exposure to some toxic chemicals compared with cigarettes.¹¹⁸ (Significantly, FDA specifically refused

to authorise PM to make its requested reduced health risk claims. Nevertheless, PMI is already using the FDA authorisation to claim that IQOS reduces risk.) The Thai experience highlights the importance of public health advocates and health ministries being proactive in anticipating and heading off these claims, including by stressing that the US law governing FDA decisions does not apply in other countries and that the USA is not a party to the FCTC.

The Thai experience also provides practical lessons for implementing the union's recommendation to ban e-cigarettes and HTPs in LMICs¹¹⁹ in part because 'LMICs lack both the resources and the enforcement mechanisms required to fully support comprehensive e-cigarette and HTP regulations'⁵ similar to what the FDA is trying to implement in the USA.

The Thai experience also reinforces the importance of the public and policy-makers being alert to tobacco industry activities in other alternative markets such as marijuana, a common product used with ENDS, and tobacco industry-created nicotine replacement therapy, which many smokers use in combination with cigarettes.¹²⁰ (The cigarette companies were considering entering the marijuana business as far back as the 1970s.¹²¹) Tobacco product innovation, alternatives and market locations may change over time, but the tobacco industry tactics and strategies remain unchanged. A whole-of-government approach should be applied in tobacco control and the government should fully comply with FCTC Article 5.3 to prevent tobacco industry interference in public health policies.

Limitations

This study relied on publicly available information such as newspaper articles, online information and information on social media. We were unable to identify if there was a direct financial relationship between ECST and PMI or if ECST was a formal part of PMI's IQOS marketing strategy.

CONCLUSION

Tactics employed by PMI and allied pro-ENDS advocates in Thailand to repeal Thailand's ENDS ban and open the Thai market to HTPs, including PMI's IQOS repeated the TTCs' playbook to expand markets for their conventional products. Creating front groups, running public relations campaigns, lobbying decision-makers, seeking to discredit health authorities and funding pro-tobacco harm reduction research were tobacco industry tactics used by Thai ENDS advocacy groups. Although ECST and PMI Thailand have continuously worked to revoke the ban since 2017, the government had kept ENDS illegal as of October2020. The government's decision resulted from the strong commitment and collaboration among Thai tobacco control organisations and their shared vision to protect the public's health from tobacco products. The linkages between the pro-ENDS movement in Thailand could inform health advocates and policy-makers in other countries where there are INNCO members and funding from FSFW Tobacco control advocates can use the Thai experience to anticipate and counter industry efforts to expand the ENDS market.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

Funding This work was supported by National Cancer Institute grant CA-087472 and the Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand. The funding agencies played no role in study design; collection, analysis, and interpretation of data; writing the report; or the decision to submit for publication.

Data availability statement

All data relevant to the study are included in the article or uploaded as supplementary information. All data used to prepare this paper are available from the cited sources.

REFERENCES

- Collaco JM, Drummond MB, McGrath-Morrow SA. Electronic cigarette use and exposure in the pediatric population. JAMA Pediatr 2015;169:177–82. [PubMed: 25546699]
- 2. Daily News. บุหรี่ไฟฟ้าทะลัก ห่วงวัยรุ่นฮิตสูบ สธ.เร่งสกัดด่วน_{Daily} News 2010:1-2.
- Cox E, Barry RA, Glantz S. E-Cigarette Policymaking by local and state governments: 2009–2014. Milbank Q 2016;94:520–96. [PubMed: 27620685]
- Kennedy RD, Awopegba A, De León E, et al. Global approaches to regulating electronic cigarettes. Tob Control 2017;26:440–5. [PubMed: 27903958]
- 5. International Union Against Tuberculosis and Lung Disease. Where bans are best: why LMICs must prohibit e-cigarette and HTP sales to truly tackle tobacco, 2020. Available: https://theunion.org/technical-publications/union-position-paper-on-e-cigarettes-and-htp-sales-in-lmics [Accessed 21 Oct 2020].
- 6. World Health Organization. Tobacco industry interference with tobacco control, 2008. Available: https://www.who.int/tobacco/publications/industry/interference/en/ [Accessed 7 Aug 2020].
- Fox BJ, Bialous SA, Trochim WMK, et al. Bethesda, MD chapter 8. evaluating tobacco industry tactics as a counterforce to assist in National cancer Institute. evaluating assist: a blueprint for understanding state-level tobacco control. tobacco control monograph No. 17. U.S. department of health and human services, National Institutes of health, National cancer Institute. NIH PUB. No. 06–6058, 2006. Available: https://cancercontrol.cancer.gov/brp/tcrb/monographs/17/ m17_complete.pdf [Accessed 3 Mar 2020].
- 8. Khaosod.

เชียงใหม่เตือน ัยบุหรี่ไฟฟ้า หมอแฉมีนินิโคติน-น.ร.ฮิตสูบเพียบ 2013;8.

- 9. Chotbenjamaporn P, Haruhansapong V, Jumriangrit P, et al. Tobacco use among Thai students: results from the 2015 global youth tobacco survey. Indian J Public Health 2017;61:S40–6. [PubMed: 28928318]
- Zavala-Arciniega L, Reynales-Shigematsu LM, Lozano P, et al. Patterns of awareness and use of electronic cigarettes in Mexico, a middle-income country that bans them: results from a 2016 national survey. Prev Med 2018;116:211–8. [PubMed: 30261244]
- Xiao L, Parascandola M, Wang C, et al. Perception and current use of e-cigarettes among youth in China. Nicotine Tob Res 2019;21:1401–7. [PubMed: 30053201]
- Soteriades S, Barbouni A, Rachiotis G, et al. Prevalence of electronic cigarette use and its determinants among 13-to-15-year-old students in Greece: results from the 2013 global youth tobacco survey (GYTS). Int J Environ Res Public Health 2020;17:1671.

- Wangkiat P Experts urge curb on e-cigarette sales. Bangkok post, 2014. Available: https:// www.bangkokpost.com/thailand/polit.ics/411764/experts-urge-curb-on-e-cigarette-sales [Accessed 12 Nov 2019].
- Yongcharoenchai C Tobacco monopoly mulls own e-cigarettes. Bangkok post, 2013. Available: https://www.bangkokpost.com/business/356447/tobacco-monopoly-mulls-own-ecigarettes [Accessed 12 Nov 2019].

15. Matichon. แพทย์ชี้แก้กม.คุมยาสูบหวังตัดตอน 'บุหรี่ไฟฟ้า' 2011:10.

 Arunmas P, Ngamkham W. Ministry to ban hookah, e-cigarettes. Bangkok post, 2014. Available: https://www.bangkokpost.com/thailand/politics/431084/ministry-to-ban-hookahe-cigarettes [Accessed 12 Nov 2019].

17. Daily News. พาณิชย์คุมนำเข้า บารากู่-บุหรี่ไฟฟ้า_{2014:7.}

- Post Reporters. Baraku, e-ciggies face import ban, 2014. Available: https://www.bangkokpost.com/ thailand/general/437688/baraku-e-ciggies-face-import-ban [Accessed 12 Nov 2019].
- Ministry of Commerce. Notification of the Ministry of Commerce: Prohibition of importing hookah and electronic hookah or electronic cigarette into Thailand B.E. 2557 (A.D. 2014), 2014. Available: https://www.tobaccocontrollaws.org/files/live/Thailand/Thailand%20-%20Ban%20on%20Hookah%2C%20E-Cigs.pdf [Accessed 12 Nov 2019].
- 20. Board of Consumer Protection. Consumer Protection Board Order No. 9 / 2015: Prohibition of sales and service of "hookahs, electronic hookahs, and electronic cigarettes, smoking materials for hookahs, and liquids for filling electronic hookahs and electronic cigarettes", 2015. Available: https://www.tobaccocontrollaws.org/files/live/Thailand/Thailand%20-%20Consumer%20Protection%20Board%20Order%20No.%209_2015.pdf [Accessed 12 Nov 2019].
- 21. Bureau of Tobacco Control. Tobacco products control act B.E. 2560 (2017), 2017. Available: http://btc.ddc.moph.go.th/th/upload/files/FULL2560_ENG.pdf [Accessed 12 Nov 2019].
- 22. Charoenca N, Mock J, Kungskulniti N, et al. Success counteracting tobacco company interference in Thailand: an example of FCTC implementation for low- and middle- income countries. Int J Environ Res Public Health 2012;9:1111–34. [PubMed: 22690186]
- 23. Hamann SL, Mock J, Hense S, et al. Building tobacco control research in Thailand: meeting the need for innovative change in Asia. Health Res Policy Syst 2012;10:3. [PubMed: 22284811]
- 24. Pongutta S, Suphanchaimat R, Patcharanarumol W, et al. Lessons from the Thai health promotion Foundation. Bull World Health Organ 2019;97:213–20. [PubMed: 30992634]
- 25. Adulyanon S Funding health promotion and disease prevention programmes: an innovative financing experience from Thailand. WHO South East Asia J Public Health 2012;1:201–7. [PubMed: 28612795]
- 26. Manager Daily 360

{degree.} 'ฟิลลิป มอร์ริส' สร้างสังคมปลอดควัน เปิดข้อมูลวิจัย ผ่านเว็ปไซต์ใหม่{2017;4}.

- ^{27. Naew Na.} ลาขาดควันยาสูบเปิดข้อเรียกร้องบริโ คบุหรี่ไฟฟ้า ^{2017;1:11.}
- 28. ENDS Cigarette Smoke Thailand.

คัดคานศูนยวิจัยและจัดการความรูเพื่อการ

้ควบคุมยาสูบ (ศจย.) ศึกษาข้อดีข้อเสียของการห้ามนำเข้าบุหรี่ไฟฟ้า

Minister of Commerce, director General department of foreign trade 2019.

29. Thairath Onjrne.

สายควันเล็งล่าชือ ชงปลดล็อก "บุหรี่ไฟฟ้า" โต้กลุ่มต้าน

บิดเบือนให้ราย, 2019. Available: https://www.thairath.co.th/news/local/bangkok/ 1671995 [Accessed 12 Nov 2019].

30. What is E-cig.

เป็นเรื่องน่ายินดีสำหรับพวกเราครับคือเมื่อวันที่ 16 ที่ผ่านมา ทางองค์กร_{innco} ที่เป็นองค์กรเกี่ยวกับกลุ่มผู้บริโ คนิโคตินในระดับโลก ได้ ให้การรับรองพวกเรา และได้ให้เข้าร่วมเป็น 1 ในสม[้]าชิกขององค์กรนี้,

2017. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 15 Nov 2019].

- INNCO. International network of nicotine consumer organisations, 2019. Available: https:// innco.org/ [Accessed 12 Nov 2019].
- International Network of Nicotine Consumer Organisations. INNCO governance documents, 2019. Available: https://innco.org/about-us/ [Accessed 12 Nov 2019].
- International network of nicotine consumer organisations. members, 2019. Available: https:// innco.org/members/ [Accessed 12 Nov 2019].
- Consumer Advocates for Smoke Free Alternatives Assoc. CASAA board of directors and officers, 2019. Available: http://www.casaa.org/board-of-directors/ [Accessed 12 Nov 2019].
- 35. Consumer Advocates for Smoke Free Alternatives Association. CASAA leadership. way back machine Internet Archive, 2014. Available: https://wayback.archive-it.org/4686/20141013184046/ http://www.casaa.org/Board_of_Directors.html [Accessed 12 Nov 2019].
- 36. Consumer Advocates for Smoke Free Alternatives Association. CASAA leadership. way back machine Internet Archive, 2015. Available: https://wayback.archive-it.org/4686/20150117032849/ http://casaa.org/Board_of_Directors.html [Accessed 12 Nov 2019].
- Consumer Advocates for Smoke Free Alternatives Association. CASAA board of directors. way back machine Internet Archive, 2014. Available: https://wayback.archive-it.org/ 4686/20140905221141/http://www.casaa.org/Board_of_Directors.html [Accessed 12 Nov 2019].
- Rodu B Tobacco tactics, 2019. Available: https://www.tobaccotactics.org/index.php? title=Brad_Rodu [Accessed 12 Nov 2019].
- 39. Phillips CV. Tobacco tactics, 2019. Available: https://www.tobaccotactics.org/index.php? title=Carl_V_Phillips#cite_note-28 [Accessed 12 Nov 2019].
- 40. Tobacco Tactics. Riccardo Polosa, 2019. Available: https://www.tobaccotactics.org/index.php? title=Riccardo_Polosa [Accessed 12 Nov 2019].
- 41. Tobacco Tactics. Heartland Institute, 2019. Available: https://www.tobaccotactics.org/index.php? title=Heartland_Institute [Accessed 12 Nov 2019].
- Bast JL. Philip Morris records Heartland Institute, 1999. Available: https:// www.industrydocuments.ucsf.edu/docs/xfcb0184 [Accessed 6 Dec 2019].
- American Vaping Association. Our sponsors. way back machine Internet Archive, 2015. Available: https://wayback.archive-it.org/4686/20150416223335/http://vaping.info/ [Accessed 12 Nov 2019].
- 44. Legg T, Peeters S, Chamberlain P et al. The Philip Morris-funded foundation for a smoke-free world: Tax return sheds light on funding activities. Lancet 2019;393:2487–8. [PubMed: 31178156]
- 45. Tobacco Tactics. Foundation for a smoke-free world Grantees, 2019. Available: https://www.tobaccotactics.org/index.php?title=Foundation_for_a_Smoke-Free_World_Grantees [Accessed 12 Nov 2019].
- 46. WHO Framework Convention on Tobacco Control. Applications for observer status to the conference of the parties, 2018. Available: https://www.who.int/fctc/cop/sessions/cop8/ FCTC_COP_8_3.pdf [Accessed 12 Nov 2019].
- Leesa-Nguansuk S. Thailand tops Internet usage charts. Bangkok post, 2018. Available: https:// www.bangkokpost.com/business/1408158/thailand-tops-internet-usage-charts [Accessed 12 Nov 2019].

- 48. What is E-cig. Page history: page created Facebook, 2014. Available: https://www.facebook.com/ endsthailand/?epa=SEARCH_BOX [Accessed 12 Nov 2019].
- 49. What is E-cig. Total followers, 2019. Available: https://www.facebook.com/pg/endsthailand/ community/?ref=page_internal [Accessed 12 Nov 2019].
- 50. What is E-cig. ตอนนี้ยอดสมาชิกบนเพจ [The current number of followers], 2014. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].
- _{51. Turakij K}อนาคตบุหรี่มวน 'ฟิลลิป มอร์ริส'_{2016:30.}
- 52. Muang B PML ชูแนวคิดลดอันตรายจากยาสูบ. Ban Muang 2016;5.
- Reuters Investigates. The Philip Morris files. Reuters, 2017. Available: https://www.reuters.com/ investigates/section/pmi/ [Accessed 12 Nov 2019].
- Bialous SA, Glantz SA. Heated tobacco products: another tobacco industry global strategy to slow progress in tobacco control. Tob Control 2018;27:s111–7. [PubMed: 30209207]
- Hodgart K, Westra N. Tobacco giant: 'tide turning' on smoke-free products in Asia. Asia Times, 2017. Available: https://www.asiatimes.com/2017/06/article/tobacco-giant-tide-turningsmoke-free-products-asia/ [Accessed 12 Nov 2019].
- DRAFT; N344. Philip Morris records, 1995. Available: https://www.industrydocuments.ucsf.edu/ docs/nsbk0093 [Accessed 14 Nov 2019].
- Drope J, Chapman S. Tobacco industry efforts at discrediting scientific knowledge of environmental tobacco smoke: a review of internal industry documents. J Epidemiol Community Health 2001;55:588–94. [PubMed: 11449018]
- Kushner T Stanton Glantz on snuffing tobacco research. Cambridge Quarterly of Healthcare Ethics 1996;5:415–21. [PubMed: 8862828]
- Landman A, Glantz SA. Tobacco industry efforts to undermine policy-relevant research. Am J Public Health 2009;99:45–58. [PubMed: 19008508]
- 60. Ong EK, Glantz SA. Constructing "sound science" and "good epidemiology": tobacco, lawyers, and public relations firms. Am J Public Health 2001;91:1749–57. [PubMed: 11684593]
- Trochim WMK, Stillman FA, Clark PI, et al. Development of a model of the tobacco industry's interference with tobacco control programmes. Tob Control 2003;12:140–7. [PubMed: 12773723]
- 62. Department of Foreign Trade.

กลุ่มลาขาดควันยาสูบคัดค[้]านการมอบหมาย

้ศูนย์วิจัยและจัดการความรู้เพื่อการควบคุมย_ูาสูบ (ศจย.ุ) ศึกษารูปแบบ_{มาตรก}

Tobacco Control Research and Knowledge Management Center (TRC) Director, 2019.

63. ENDS Cigarette Smoke Thailand. Facebook "What is E-cig" ค้านตั้งศจย.ศึกษาแบน นำสงการบิดเบือนและนำเสนองานวิจัยจาก 2019. Available: http://

bit.ly/2ZJtCG8 [Accessed 13 Nov 2019].

64. ENDS Cigarette Smoke Thailand. บหรี่ไฟฟ้า,

ศูนย์วิจัยและจัดการความรู้เพื่อการควบคุมยาสูบ (ศจย.) และคัดค้านการมอบ หมายให้ศจย.เป็นหน่วยงานหลักที่ทำการศึกษาผลกระทบของประกาศห้ามน์ food and drug administration Secretary, 2019.

65. What is E-cig.

เอ้า ทุกคนครับบบ เรียนเชิญไปเม้นชี้ทางสว่างให้มติชนเขา

หนอยครับ, 2017. Available: https://www.facebook.com/pg/endsthailand/posts/? ref=page_internal [Accessed 12 Nov 2019].

66. What is E-cig.

แหม่! ศจย.ครับ อัพเดตหนอยถาจะเอาขอมูลเคามาขู._{Facebook},

2018. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

67. What is E-cig.

ศ.เกียรติคณ ดร.นพ.สมชัย ราชบัณฑิตสำนักวิทยาศาสตร์ ราชบัณฑิตยส า

2019. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

68. What is E-cig.

้โฉมหน้้านักวิจัยที่หนุนให้รัฐบาลไทยแบนบุหรี่ไฟฟ้าต่อไป น่าเชื่อถือขนาดไ

2019. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

69. Manager Weekend 360 degree.

ับหรี่ไฟฟ้า' เอาไงดี?? ต้องห้ามหรือควบคุม._{Manager Weekend 360}

degree 2018;57.

- 70. PMI Impact. Selected projects: second funding round, 2019. Available: https://www.pmiimpact.com/updates/secondfundinground [Accessed 14 Nov 2019].
- 71. Rangsit

_{University. '}ขอเชิญผู้สนใจร่วมฟังเสวนา เรื่อง "เศรษฐกิจใต้ดิน

กฎหมาย และบฺหรี่ไฟฟ้าในประเทศไทย", 2019. Available: https://

www2.rsu.ac.th/News/Inno-2019 [Accessed 14 Nov 2019].

72. Kasetsart

_{University.}มาตรการทาง าษีสรรพสามิตและกฎหมายที่เหมาะสม

สำหรับอตสาหกรรมยาเส^{ิ้}นมวนเอง, _{2006. Available: https://}

research.ku.ac.th/forest/Project.aspx?ProjectNumber=0630926000&BudgetYear=2006 [Accessed 14 Nov 2019].

73. Manager Daily 360 degree. ชงเก็บ าษีบุหรี่ไฟฟ้าแทนการแบน 2019;10.

- 74. Tobacco Tactics. Global forum on nicotine, 2019. Available: https://www.tobaccotactics.org/ index.php?title=Global_Forum_on_Nicotine [Accessed 12 Nov 2019].
- 75. Global forum on nicotine. GFN 2019 programme, 2019. Available: https://gfn.net.co/2019/ programme [Accessed 14 Nov 2019].
- 76. Zillatron N GFN18 INNCO Thailand. YouTube, 2018. Available: https://www.youtube.com/watch? v=ibuXs_bQ6sg [Accessed 28 Nov 2019].
- 77. Foundation for A Smoke-Free World. Tobacco transformation index, 2019. Available: https://www.smokefreeworld.org/advancing-industry-transformation/smoke-free-index/ [Accessed 14 Nov 2019].
- 78. Gallagher AW, Gilmore AB, Hefler M. Euromonitor international now accepts tobacco industry funding: a WIN for PMI at the expense of research on the tobacco industry. Tobacco Control 2019.
- 79. Southeast Asia Tobacco Control Alliance. Foundation funded by Philip Morris 'hijacks' SEATCA's Smoke-Free Index, 2019. Available: https://seatca.org/foundation-funded-by-philipmorris-hijacks-seatcas-smoke-free-index/[Accessed 12 Nov 2019].
- 80. Global Center for Good Governance in Tobacco Control. Public statement in relation to the invitation to attend tobacco industry-backed 'Smoke Free Dialogue', 2019.

Available: https://ggtc.wodd/2019/07/01/tobacco-industrys-smoke-free-dialogue-global-center-for-good-governance-in-tobacco-control/ [Accessed 12 Nov 2019].

- Index SS-F, 2019. Available: https://eu.eventscloud.com/ehome/200190560/Thailand/ [Accessed November 28, 2019].
- 82. Turakij K

เครือข่ายยาสูบไทยคว่ำบาตรประชุมมูลนิธิรับทุนบ.บุหรี่ 2019:13:16.

- WHO Framework Convention on Tobacco Control. India heightens efforts to protect health policies against tobacco industry vested interests, 2019. Available: https://untobaccocontrol.org/kh/article-53/india-heightens-efforts-protect-healthpolicies-tobacco-industry-vested-interests/ [Accessed November 14, 2019].
- 84. The nation. Philip Morris Thailand denies involvement in activities of foundation for a smoke-free world. The Nation 2019.
- MacKenzie R, Ross H, Lee K. 'Preparing ourselves to become an international organization': Thailand tobacco monopoly's regional and global strategies. Glob Public Health 2017;12:351–66. [PubMed: 28139965]
- MacKenzie R, Collin J, Sriwongcharoen K. Thailand--lighting up a dark market: British American tobacco, sports sponsorship and the circumvention of legislation. J Epidemiol Community Health 2007;61:28–33. [PubMed: 17183011]
- MacKenzie R, Lee K, LeGresley E. To 'enable our legal product to compete effectively with the transit market': British American Tobacco's strategies in Thailand following the 1990 GATT dispute. Glob Public Health 2016;11:348–62. [PubMed: 26295971]
- MacKenzie R, Collin J. "Trade policy, not morals or health policy": the US Trade Representative, tobacco companies and market liberalization in Thailand. Glob Soc Policy 2012;12:149–72. [PubMed: 25705122]
- MacKenzie R, Collin J, Sriwongcharoen K, et al. "If we can just 'stall' new unfriendly legislations, the scoreboard is already in our favour": transnational tobacco companies and ingredients disclosure in Thailand. Tob Control 2004;13 Suppl 2:ii79–87. [PubMed: 15564225]
- 90. Mackenzie R, Collin J. "A good personal scientific relationship": Philip Morris scientists and the Chulabhorn Research Institute, Bangkok. PLoS Med 2008;5:e238–48.
- Sinsuwarn N, Sthapitanonda P. Winning with the public, winning in court: advocacy lessons learnt from 85% pictorial health warning campaign in Thailand. Tob Control 2019;28:e3–6. [PubMed: 31004007]
- MacKenzie R, Lee K. Pmi's proxy trade dispute with Thailand. Tob Control 2019. doi:10.1136/ tobaccocontrol-2019-055374. [Epub ahead of print: 12 Dec 2019] (published Online First: 2019/12/14).
- Han E Secret industry funding of doctor-led vaping lobby group laid bare. The Sydney morning herald, 2018. Available: https://www.smh.com.au/healthcare/secret-industry-funding-ofdoctor-led-vaping-lobby-group-laid-bare-20180823-p4zzc5.html [Accessed 6 Aug 2020].
- Thailand tobacco monopoly, Sasin management consulting. e-cigarette study report. Thailand tobacco monopoly, 2015. Available: https://www.thaitobacco.or.th/th/2015/07/006815.html [Accessed 7 Aug 2020].
- 95. Euromonitor international. brand shares: cigarettes Thailand, 2020. Available: https:// www.portal.euromonitor.com/portal/statisticsevolution/index [Accessed 6 Aug 2020].
- 96. RYT9.

รัฐบาลนิวซีแลนด์เตรียมอนุมัติบุหรี่ไฟฟ้าเป็นสินค้าถูกกฎหมาย มุ่งเป็นป_{ระเท}

2025, 2017. Available: https://www.ryt9.com/sZprg/2634657 [Accessed 29 Jun 2020].

- 97. Manager Online. หนุนบุหรี่ไฟฟ้าสินค้าควบคุม, 2017. Available: https://mgronline.com/daily/detail/9600000107583 [Accessed 29 Jun 2020].
- Nutt DJ, Phillips LD, Balfour D, et al. Estimating the harms of nicotine-containing products using the MCDA approach. Eur Addict Res 2014;20:218–25. [PubMed: 24714502]

- The Lancet. E-cigarettes: Public Health England's evidence-based confusion. The Lancet 2015;386.
- 100. Eissenberg T, Bhatnagar A, Chapman S, et al. Invalidity of an oft-cited estimate of the relative harms of electronic cigarettes. Am J Public Health 2020;110:161–2. [PubMed: 31913680]
- 101. Shannonhouse D, Walk R. Italian media news, 2004. Available: https:// www.industrydocuments.ucsf.edu/docs/qtgx0150 [Accessed 26 Nov 2019].
- 102. Gornall J Public health England's troubled TRAIL. BMJ 2015;351:h5826. [PubMed: 26534902]
- Tobacco tactics. Nicoventures, 2016. Available: https://www.tobaccotactics.org/index.php/ Nicoventures [Accessed 28 Nov 2019].
- 104. Rodu B, Plurphanswat N, Hughes JR, et al. Associations of proposed relative-risk warning labels for snus with perceptions and behavioral intentions among tobacco users and nonusers. Nicotine Tob Res 2016;18:809–16. [PubMed: 26253616]
- 105. Imperial Tobacco Ltd. re: Project Viking. Ness Motley law firm documents. Available: https:// www.industrydocuments.ucsf.edu/docs/jggd0040 [Accessed 14 Nov 2019].
- 106. Southeast Asia Tobacco Control Alliance. SEATCA FCTC Scorecard: measuring implementation of the world Health organization framework convention on tobacco control, 2018. Available: https://seatca.org/dmdocuments/FCTC%20Scorecard%20Sept%202018.pdf [Accessed 4 Mar 2020].
- 107. Institute for Global Tobacco Control. E-Cigarette policy scan, 2019. Available: https:// www.globaltobaccocontrol.org/e-cigarette/sale [Accessed 3 Mar 2020].
- 108. Hefler M Worldwide news and Comment. Tob Control 2019;28:599-602.
- 109. Institute for Global Tobacco Control. Countries that regulate heated tobacco, 2019. Available: https://globaltobaccocontrol.org/resources/countries-regulate-heated-tobacco [Accessed 20 Aug 2019].
- 110. Yong H-H, Borland R, Balmford J, et al. Trends in e-cigarette awareness, trial, and use under the different regulatory environments of Australia and the United Kingdom. Nicotine Tob Res 2015;17:1203–1 1. [PubMed: 25358657]
- 111. Kalra A India says e-cigarette ban implies use of devices also prohibited. Reuters, 2019. Available: https://www.reuters.com/article/us-india-ecigarettes/india-says-e-cigarette-banimplies-use-of-devices-also-prohibited-idUSKBN1XS1DR [Accessed 12 Dec 2019].
- 112. IANS. Parliament passes the bill banning e-cigarettes. The economic times, 2019. Available: https://economictimes.indiatimes.com/news/politics-and-nation/parliament-passes-thebill-banning-e-cigarettes/articleshow/72335714.cms [Accessed 12 Dec 2019].
- 113. Woodley M Government to impose 12-month ban on most e-cigarette imports. newsGP, 2020. Available: https://www1.racgp.org.au/newsgp/professional/government-toimpose-12-month-ban-on-most-e-cigare [Accessed 29 Jun 2020].
- 114. Mendelsohn C Government announces major crackdown to effectively ban nicotine imports. Australian tobacco harm reduction association, 2020. Available: https://www.athra.org.au/ blog/2020/06/19/government-announces-major-crackdown-to-effectively-ban-nicotine-imports/ [Accessed 29 Jun 2020].
- 115. Karp P Coalition MPS revolt against ban on people importing liquid nicotine for vaping. The guardian, 2020. Available: https://www.theguardian.com/australia-news/2020/jun/24/coalitionmps-revolt-against-ban-on-people-importing-liquid-nicotine-for-vaping [Accessed 29 Jun 2020].
- 116. Henderson A Health Minister Greg Hunt delays ban on vaping imports until next year. ABC news, 2020. Available: https://www.abc.net.au/news/2020-06-26/greg-hunt-backflips-on-vaping-ban-by-six-months/12399346 [Accessed 6 Aug 2020].
- Lempert LK, Glantz S. Analysis of FDA's IQOS marketing authorisation and its policy impacts. Tob Control 2020. doi:10.1136/tobaccocontrol-2019-055585. [Epub ahead of print: 29 Jun 2020].
- 118. U.S. Food and Drug Administration. FDA authorizes marketing of IQOS tobacco heating system with 'reduced exposure' information, 2020. Available: https://www.fda.gov/news-events/press-announcements/fda-authorizes-marketingiqos-tobacco-heating-system-reduced-exposure-information [Accessed 7 Aug 2020].
- 119. International Union Against Tuberculosis and Lung Disease. Ban e-cigarettes and HTPs in LMICs to prevent a new epidemic of nicotine addiction, says new Union position paper,

2020. Available: https://www.theunion.org/news-centre/news/ban-e-cigarettes-and-htps-in-lmicsto-prevent-a-new-epidemic-of-nicotine-addiction-says-new-union-position-paper [Accessed 29 Jun 2020].

- 120. Apollonio D, Glantz SA. Tobacco industry research on nicotine replacement therapy: "If anyone is going to take away our business it should be us". Am J Public Health 2017;107:1636–42. [PubMed: 28817320]
- 121. Barry RA, Hiilamo H, Glantz SA. Waiting for the opportune moment: the tobacco industry and marijuana Legalization. Milbank Q 2014;92:207–42. [PubMed: 24890245]
- 122. ENDS Cigarette Smoke

{Thailand.} ขออนุญาต์เข[้]าพบเพื่อนำเสนอแนวทางควบคุม บุหรี่ไฟฟ้าในร่าง พ.ร.บ.ควบคุมผลิต[ั]ณฑ์ยาสูบ พ.ศ._{Chair of}

Ad hoc Committe on Tobacco Products Control Bill B.E. Facebook "What is E-cig" 2017.

123. Action on Smoking and Health Foundation Thailand.

บุหรี่ไฟฟ้าอันตรายมากกว่าที่คุณคิด, _{2017. Available: https://}

ashthailand.or.th/th/news_page.php?id=1027 [Accessed 13 Nov 2019].

124. ENDS Cigarette Smoke

Thailand. ลดระดับบุหรี่ไฟฟ้าจาก "สินค้าต้องห้าม" เป็น

"สินคาควบคุม", 2017. Available: https://goo.gl/2mnCCv [Accessed 13 Nov 2019].

125. Post Reporters. Network fired up over electronic cigarette ban. Bangkok post, 2017. Available: https://www.bangkokpost.com/thailand/general/1378195/network-fired-up-overelectronic-cigarette-ban [Accessed 12 Nov 2019].

{126. Posttoday.} ประชาชนยื่นรายชื่อหยุดแบนบุหรี่ไฟฟ้า{2017:B8.}

127. Committee on Commerce Industry and Labor National Legislative Assembly of Thailand.

รายงานการพิจารณาศึกษาเรื่อง การขอความเป็นธรรมในการพิจารณาทบท ^{2018.}

128. Naew Na.

ึกมธ.พาณิชย[์]ฯเสนอแนะอย่าปิดกั้นบุหรี่ไฟฟ้าทางเลือ[์]กใหม่/รัฐได_{้าษี} ^{2018:1–2.}

129. Muang B

้เครือข่ายบุหรี่ไฟฟ้าพอมีหวังกมธ.พาณิชย์ยอมรับฟังข้อมูล,

2018. Available: https://www.banmuang.co.th/news/economy/104983 [Accessed 12 Nov 2019].

130. Matichon.

แพทย[์]ค้านสนช.ทบทวนบุหรี่ไฟฟ้า ยันมีสารพิษกลุ่มกลีเซอรีนก่อมะ_{เร็ง} ^{2018;7.}

131. Matichon.

ึกลุ่มลาขาดควันยาสูบ ร้องผู้ตรวจการฯ สอบปมแบนบุหรี่ไฟฟ้า,

2018. Available: https://www.matichon.co.th/news-monitor/news_1132236 [Accessed 12 Nov 2019].

132. Thai Post.

พาณิชย์จ่อถกแก้ปมปลดล็อคบุหรี่ไฟฟ้า ชงเลิกห้ามนำเข้า!

2018;6.

133. Department of Foreign

{Trade.} รายงานการประชุมเรื่อง ทบทวนมาตรการห้ามนำ เข้าบุหรี่ไฟฟ้า{2018.}

134. Naew Na.

้ผู้ใช้บุหรี่ไฟฟ้าหารือ าครัฐ หนูนสรรพสามิตจัดเก็บ าษี ^{2018;10.}

{135. Khaosod.}สรรพสามิตเล็งเก็บ าษีบุหรี่ไฟฟ้า.{2018;6.}

{136. Posttoday.} พรรคการเมืองหนุนเลิกแบนบุหรี่ไฟฟ้า{2019:B6.}

137. Thairath

พรรคการเมืองหนุนเลิกแบนบุหรี่ไฟฟ้า หาแนวทางควบคุม ชงเป็นทางเลือก

2019. Available: https://www.thairath.co.th/news/local/bangkok/1527023 [Accessed 12 Nov 2019].

138. What is E-cig.

อีกหนึ่งพรรคการเมืองที่ต้องการหยุดความล้าหลังของกฎหมายบุหรี่ไฟฟ้า,

2019. Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

{139. What is E-cig.}พื้นที่ชลบุรี เบื่อมั้ยกับการตั้งด่านจับบุหรี่ไฟฟ้า,{2019.}

Available: https://www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

140. What is E-cig. มุมมองใหม่ๆ เปิดใจ เพื่อเข้าใจ, 2019. Available: https://

www.facebook.com/pg/endsthailand/posts/?ref=page_internal [Accessed 12 Nov 2019].

141. Hicks W Pmi tries lobbying against e-cigarette ban. Bangkok Post 2019:B1–5.

{142. Matichon.}อนุทิน' ถกสสส.ปิดตายบุหรี่ไฟฟ้า{2019;3.}

- 143. Bangprapa M Pm to keep e-cigs illegal. Bangkok post, 2019. Available: https:// www.bangkokpost.com/thailand/general/1733799/pm-to-keep-e-cigs-illegal [Accessed 12 Nov 2019].
- 144. The National Assembly Radio and Television Broadcasting Station, สี.ส. กทม. พรรค

เพื่อไทย รับหนังสือจาก ตัวแทนเครือข่ายผู้ใช้บุหรี่ไฟฟ้า "กลุ่มลาขาดควัน

2019. Available: https://www.parliament.go.th/ewtadmin/ewt/parliament_parcy/ewt_news.php? nid=59131&filename=welcome2019 [Accessed 12 Nov 2019].

_{145. Matichon.} แพทย-นักวิชาการชื่นชนอนุทิน _{2019;7.}

- 146. US-ASEAN Business Council. US-ABC and U.S. chamber of Commerce convene U.S. business leaders to honor Thai prime minister Prayut Chan-o-cha on sidelines of un General assembly, 2019. Available: https://www.usasean.org/press-release/2019/09/25/us-abcand-us-chamber-commerce-convene-us-business-leaders-honor-thai-prime [Accessed 12 Nov 2019].
- 147. Phillip Morris International. Why was PMI in New York during UNGA 2019? 2019. Available: https://www.pmi.com/our-initiatives/itstime/why-is-pmi-in-new-york-duringunga-2019 [Accessed 14 Nov 2019].

What this paper adds

- Philip Morris Thailand and allied Thai's electronic nicotine delivery systems (ENDS) advocates followed the same tactics the tobacco industry used decades ago in their unsuccessful efforts to reverse Thailand's ENDS ban to open the Thai market to heated tobacco products, including Philip Morris International's IQOS.
- Strong commitment, good collaboration and prompt responses of Thai tobacco control advocates were fundamental keys to successful countering tobacco industry efforts to overturn the ENDS ban.
- The Thai experience can inform other countries where ENDS are illegal on tactics the industry would use to legalise ENDS and how to counter these industry tactics.

11 1000J II	g acuvines 1 Advoracy	O IIII IIIE DAII OII E-CIGATEILES Gavernment agencies TI	11 1000ying activities to lift the bail on e-cigareties and actions of 1 C advocates between January 2017 and November 2019 Advocary Government scencies TI	10er 2019
Date	Advocacy group	Government agencies 11 approached	TI activities	TC activities
January 2017	ECST	Office of the Prime Minister Ministry of Finance Ministry of Industry Ministry of Science and Technology MOC MOPH	ECST wrote and sought meetings seeking to lift ENDS ban, claiming ENDS were less harmful than combustible cigarettes and good alternatives for current smokers. ¹²²	ASH and BOT held a public seminar 'E- cigarettes are more dangerous than you think' that warned public about the new HTPs TTCs were marketing outside of Thailand, and predicted TTCs would fight Thailand's ban. ¹²³
April 2017	IMd	Ministry of Finance MOPH Tobacco Authority of Thailand	PMI announced it was pleased to present its research findings about HTP to these agencies for Thailand to achieve a smoke-free society. ⁹⁶	
August 2017	ECST	МОРН	ECST made a public proposal to MOPH to legalise ENDS. ²⁷	
October 2017	ECST	Thai government	ECST launched a petition campaign on Change.org to change the status of ENDS from a banned to a controlled product. $^{\rm 124}$	
November 2017	ECST	Committee on Commerce, Industry and Labour of the National Legislative Assembly	 ECST submitted its Change.org petition with 17 000 signatures asking for the right to use less harmful products than traditional cigarettes.¹²⁵¹²⁶ As a result, in December 2017, the Commerce Subcommittee held two formal meetings with MOC, MODFH and ECST to review the ban on ENDS.¹²⁷ In march 2018, Committee Chair General Singust Singpai suggested the government to consider both the risks and benefits of ENDS and recommended six options to control them¹²⁸. I. The government should adopt a clear policy on the import and use of ENDS and may use ENDS as an altemative cessation tool. J. The government should set industrial standard conditions for ENDS devices. J. Thai FDA should set industrial standard conditions for ENDS devices. J. Thai FDA should set up are authorised by FDA and the products devices. F. The government should be controlled, taxed and restricted similar to alcohol or cigarette willing to quit and allow them to access ENDS. G. ENDS should be controlled, taxed and restricted similar to alcohol or cigarette products. ECST publicly declared that the Committee was convinced that ENDS should be controlled, taxed and restricted similar to alcohol or cigarette products. 	In January 2018, ASH issued a press release urging the National Legislative Assembly not to revoke the ban. ¹³⁰ ASH director Dr Prakit Vathesatogisti informed the public that the claim e-cigarettes were 95% less harmful was unreliable. ¹³⁰
September 2018	ECST	Office of Ombudsman Ministry of Sport and Tourism MOC	ECST submitted its Change.org petition with 40 000 signatures asserting that ENDS laws violated the rights of consumers to a less harmful product and claimed the ban would negatively affect tourism. ¹³¹ MOC called a stakeholders' meeting on 31 October 2018 to consider ECST's issues. ¹³² Participants included 54 representatives from 19 organisations, including 2 members from ECST and 4 TC advocates from ASH, TRC and Thai Health. ¹³³ ECST (Asa Saligupta and Maris Karanyawat), the director of the government's	At the MOC 31 October 2018 meeting, ASH, TRC and ThaiHealth presented information to convince MOC and other agencies to continue the ENDS ban and opposed ECST's participation in the MOC meeting on the grounds that it violated WHO FCTC Article 5.3, which commits parties to insulating public health policy decisions from the TL ¹³³

Tob Control. Author manuscript; available in PMC 2022 November 01.

Author Manuscript

Author Manuscript

Date	Advocacy group	Government agencies TI approached	TI activities	TC activities
			Excise Department (Patchara Anuntasilpa) and the Federation of Thai industries (Dr Nilsuwan Leelarasamee) supported legalising ENDS. ¹³³ (Dr Nilsuwan Leelarasamee) supported legalising endoted by the federation of the federatio	The meeting concluded with a recommendation to form a working group to review the current laws on e-cigarettes. ¹³³ The working group consisted of MOC, MOPH, Ministry of Sport and Tourism, Excise Department, Custom Department, Consumer Protection Board, Office of the Narcotics Control Board, Office of the Narcotics Control Board, Office of the Narcotics Control Board, Office of the Narcotics That was a victory for TC advocates who blocked ESST's attempt to repeal the ban.
November 2018	ECST	Excise Department	ECST met with the director (Patchara Anuntasilpa) to support legalisation of e-cigarettes. ¹³⁴ The director announced, 'The Excise Department is ready to tax ENDS to be a legitumate product because they are not a drug, not a weapon of war. However, in the past, MOC banned imports as proposed by MOPH that did not want people to use ENDS. This causes problems for both consumers in countries that smuggled these products for personal use. Importantly, it affects tourists who carry ENDS with them. This is becoming a bigger problem. ¹³⁵	
March 2019	ECST	Political parties: Bhumjaithai, Chart Pattana, Democrat, Thai Liberal and Thai Local Power	ECST met and submitted its Change.org petition supporting legalisation of e- cigarettes to parties' representatives. ¹³⁶¹³⁷ At least three candidates for the Thai House from three political parties (Chart Pattana, Thai Liberal, Thai Local Power) appeared on ECST's Facebook pledging to revoke the ban if elected. ¹³⁸⁻¹⁴⁰	
July 2019	IM	MOC Excise Department	PMI met with these agencies and recommended revoking the ban claiming that its ENDS products would help Thailand tremendously reduce smoking rates. ¹⁴¹ e	In August 2019, ThaiHealth held its first executive board meeting under new chair, Anutin Charnvirakul, the newly appointed Minister of Public Health. ThaiHealth and ASH dinated to have ASH director Dr Prakit Vathesatogkit inform the new chair on e-cigarettes' risks and problems in Thailand. After the meeting, the Minister amounced he did not intend to lift the ban because e-cigarettes were harmful to youth' ¹⁴² The next day, the prime minister also vowed to retain the ban on ENDS; he said, Making decisions on this matter, the government cannot simply consider the economic impact. ENDS will also impact people's health and an extra burder on healthcare budget' ¹⁴³ The prime minister also ordered MOPH to educate people about ENDS' harm and crack down illegal sale of ENDS. ¹⁴³
August 2019	ECST	Pheu Thai Party (as a core member of the seven opposition parties)	ECST submitted a letter opposing the ban after the prime minister and Minister I of Public Health vowed to retain the ban. ¹⁴⁴	Public health communities issued a press release thanking the Minister of Public Health for supporting the ban. ¹⁴⁵
September 2019	IMI	Prime Minister and 10 Thai government representatives (Don Pramudwinai, Minister	PMI co-hosted a reception for Thai PM and representatives during the United Nations General Assembly (UNGA) in New York. ¹⁴⁶ PMI announced on its website that it wanted to engage UNGA's participants to share its vision of a	

Author Manuscript

Author Manuscript

Date

Author Manuscript

TC activities	
TI activities	smoke-free society (ie, promote IQOS and harm reduction) and its scientific findings about its HTP ¹⁴⁷ We do not know if there was a discussion about PMI's plan to introduce IQOS to Thailand.
Government agencies TI approached	of Foreign Affairs; Varawu Sipa-archa, Minister of Natural Resources and Environment; Thani Thongphakdi, Ambassador to the United States; Vitavas Srivihok, Ambassador and Permanent Representative to the United Nations; Distat Hortakiya, secretary-general to the prime minister; Busaya Mathelin, Permanent Scoteary of Foreign Affairs; Natumon Pinyosinwat, Government Spokesperson, Witchu Vejjajiya, Director Government Spokesperson, Witchu Vejjajiya, Director Government Spokesperson, Witchu Vejjajiya, Director Government Spokesperson, Witchu Vejjajiya, Director Government, New York Office; and Alongkorn Poonlabat, Senior Advisor to the Minister of Agriculture and Cooperatives). ¹⁴⁶
Advocacy group	

on Tobacco Control; FDA, Food and Drug Administration; HTPs, Heated tobacco products; MOC, Ministry of Commerce; MOPH, Ministry of Public Health; PMI, Philip Morris International; TC, tobacco ASH, Action on Smoking and Health Thailand; BOT, Bureau of Tobacco Control; ECST, ENDS Cigarette Smoking Thailand; ENDS, electronic nicotine delivery systems; FCTC, Framework Convention control; ThaiHealth, Thai Health Promotion Foundation; TI, tobacco industry; TRC, Tobacco Control Research and Knowledge Management Center; TTCs, transnational tobacco companies. Author Manuscript

Table 2

Summary of tobacco control actions on ENDS ban in Thailand

Objectives	Key actors Actions	Actions
Advocate for specific laws to ban ENDS	ASH BOT	 Updated the definition of tobacco control products in the TPCA. Worked with MOC to issue a ministerial notification banning the import of e-cigarettes. Worked with OCPB to issue an administrative order banning the sale of ENDS.
Educate public and policy-makers on danger of ENDS	ASH TRC THPAAT ThaiHealth	 Provided updated information about the risk of ENDS via social media, newspapers, television, radio, conferences and meetings. Targeted key policy-makers. Addressed three key issues: ENDS are harmful, not approved as effective quitting tools and raise initiation among teens.
Counteract pro-ENDS advocates	ASH TRC	 Opposed ENDS advocates serving on the government established working group or committee to consider e-cigarette policy. Blocked TI research funding to Thai researchers. Disclosed relationship between ENDS advocates and the TI. Supported policy-makers to keep the ban.

Board; ThaiHealth, Thai Health Promotion Foundation; THPAAT, Thai Health Professionals Alliance Against Tobacco; TI, tobacco industry; TPCA, Tobacco Products Control Act; TRC, Tobacco Control ASH, Action on Smoking and Health Thailand; BOT, Bureau of Tobacco Control; ENDS, electronic nicotine delivery systems; MOC, Ministry of Commerce; OCPB, Office of the Consumer Protection Research and Knowledge Management Center.