

MEMORANDUM

Strengthening Act 852: An Evidence-Based, Whole-of-Government
Approach to Nicotine Regulation in Malaysia

Submitted to:

Prime Minister's Office of Malaysia (PMO)
Ministry of Health Malaysia (KKM)
Ministry of Finance Malaysia (MOF)
Ministry of Home Affairs Malaysia (KDN)
Ministry of Domestic Trade and Cost of Living (KPDN)
Ministry of Investment, Trade and Industry (MITI)

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Executive Summary

This memorandum accompanies the policy paper *Strengthening Act 852: A Pragmatic Approach to Nicotine Regulation in Malaysia* (April 2026) and its addendum addressing the narcotics–vaping nexus. It presents consolidated, evidence-based recommendations to the Government of Malaysia, grounded in a whole-of-government framework that balances health, economic, regulatory, enforcement, and social considerations.

Nicotine regulation in Malaysia is no longer solely a public health matter. It has become a multidimensional governance issue involving the Ministry of Health, the Ministry of Finance, the Ministry of Home Affairs, the Ministry of Domestic Trade and Cost of Living, enforcement agencies, local authorities, and the Prime Minister’s Office. This memorandum therefore proposes that future policy decisions relating to Act 852 should be guided by a coordinated inter-ministerial approach rather than pursued through the lens of any single ministry.

Malaysia’s nicotine market faces a convergence of crises. The Global Adult Tobacco Survey 2023 (GATS-M 2023) records an adult smoking prevalence of 19.0%, well above the KKM’s 15% target for 2025.[1] More than half of all cigarettes consumed nationally are illicit, costing the Government an estimated RM5 billion in foregone excise revenue annually.[2][3] The discovery of furanylfentanyl and synthetic cannabinoids in adulterated vape cartridges has exposed a dangerous new vector for narcotics distribution.[4] The Government is estimated to spend RM16 billion annually on smoking-related diseases, amounting to RM4 in healthcare costs for every RM1 collected in tobacco excise.[5]

Against this backdrop, proposals for blanket bans on vaping products would dismantle the regulated marketplace that Act 852 was designed to create, surrender market oversight to criminal syndicates, and fail to address the underlying problems of narcotics trafficking and illicit tobacco trade. This memorandum argues that the Government should instead strengthen Act 852 through risk-proportionate amendments, while deploying targeted enforcement against narcotics infiltration of commercial nicotine channels.

1. Introduction: The Case for a Whole-of-Government Approach

The regulation of smoking and nicotine products has evolved considerably. Historically, tobacco control policies were designed primarily to reduce smoking prevalence and mitigate health consequences associated with combustible tobacco. However, the emergence of alternative nicotine products, changing consumer behaviour, cross-border e-commerce, and increasingly sophisticated illicit trade networks have fundamentally altered the policy landscape.

Act 852, the Control of Smoking Products for Public Health Act 2024, was gazetted on 2 February 2024 and enforced from 1 October 2024.[6][7] It represents a significant milestone: for the first time, Malaysia has established a comprehensive legal framework governing smoking

products and nicotine-containing products under a single regulatory regime. The Act covers tobacco products, vapes (classified as “smoking substances”), and heated tobacco products (classified as “substitute tobacco products”), imposing uniform requirements for pre-market registration, advertising bans, sales controls, packaging and labelling standards, and public use restrictions.

However, the effectiveness of Act 852 should not be evaluated solely by the number of restrictions introduced. It must be assessed by whether it can improve public health outcomes, strengthening regulatory oversight, reducing illicit market activity, protecting consumers and youth, preserving government revenue, and supporting effective enforcement. These objectives require coordination across multiple agencies and policy domains.

This memorandum is structured in nine substantive sections. It begins with the current policy challenges, proceeds through the regulatory landscape and its shortcomings, analyses the illicit market crisis and the narcotics–vaping nexus, presents the scientific and international evidence base, examines fiscal and economic implications, and concludes with specific policy recommendations and a call to action.

A whole-of-government approach acknowledges that the objectives of public health, consumer protection, fiscal sustainability, and enforcement effectiveness are interconnected rather than mutually exclusive. Efforts to reduce illicit trade contribute not only to revenue protection but also to improved consumer safety and stronger regulatory oversight. Strengthening supply-chain transparency assists enforcement agencies while simultaneously improving compliance and market accountability. Regulatory decisions should therefore be grounded in evidence, proportionate to the risks they address, and assessed according to their overall impact across health outcomes, enforcement costs, illicit market activity, economic behaviour, and consumer welfare.

2. Current Policy Challenges

2.1. The persistence of illicit trade

Malaysia continues to experience among the highest incidences of illicit tobacco consumption in Southeast Asia. The NielsenIQ Illicit Cigarettes Study 2025, commissioned by the Confederation of Malaysian Tobacco Manufacturers (CMTM), found that illicit cigarettes account for 54.4% of total cigarette consumption nationally, with incidence rates of 77.3% in Sabah and 78.8% in Sarawak.[8] The study also flagged rising concern over counterfeit tax stamps, with national fake tax stamp incidence increasing by 1.7 percentage points year-on-year.

A decade ago, legal cigarettes held 66.3% of the total nicotine market. Today they account for just 23.8%, while illicit cigarettes represent 29.9%, vapes and heated tobacco products constitute 25.3%, and dual users occupy the remaining 20.4%. The core regulatory challenge is no longer simply tobacco use, but a market that has been deeply captured by illicit supply.

The price differential remains the fundamental driver. Following the Budget 2026 excise duty increase of two sen per stick, effective 1 November 2025, legal cigarettes now retail at approximately RM18.20–RM18.40 per pack for premium brands, while illicit packs are available for as little as RM3.[9][10] This six-to-one price ratio makes enforcement-only strategies structurally insufficient.

The scale of cross-border criminal enterprise was further illustrated by a Philippine factory raid in Cebu in April 2026, which uncovered an industrial-scale counterfeit cigarette operation with Malaysia identified as the primary target market and two Malaysian companies named in Philippine media reports.[11]

2.2. The narcotics–vaping nexus

Recent incidents involving synthetic narcotics have further complicated the policy environment. Ops Vape 1.0, conducted from 13 to 17 April 2026, inspected 1,670 vape premises nationwide. Of these, 728 were found in violation of regulations. The operation resulted in 20 arrests, the seizure of 8,091 devices, 5,257 cartridges, and 19.67 kg of drugs, including 18.56 kg of liquid suspected to contain furanylfentanyl, a potent fentanyl derivative.[12][13]

Separate operations in Sarawak seized 1,281 cannabis-laced vape cartridges worth RM576,450, linked to a syndicate active since November 2025 that sourced drugs from Peninsular Malaysia and distributed them via courier services.[14] The Deputy Health Minister reported that 96 investigation papers involving drug-laced vape liquids were recorded between early 2024 and March 2025, with over 70% testing positive for synthetic cannabinoids and amphetamines.[15]

These incidents are serious and demand robust enforcement responses. However, it is analytically essential to distinguish the narcotics problem from the nicotine regulation problem. The adulteration of vape products with synthetic drugs is a criminal supply-chain issue, not a product-category issue. Any consumer product can be co-opted as a vessel for illicit substances. The appropriate policy response is targeted enforcement against chemical adulterants and their distributors, not a blanket prohibition on the hardware through which they are delivered.

2.3. The proposed ban and its implications

Health Minister YB Datuk Seri Dr Dzulkefly Ahmad announced in December 2025 that the Cabinet had agreed in principle to a nationwide vape ban, beginning with open-system devices.[16][17] The MOH has since confirmed its aim to implement the ban by mid-2026 or the end of the year at the latest.[18]

While the concerns motivating this proposal are legitimate, the proposal itself conflates two distinct problems: the narcotics distribution challenge and the nicotine market regulation challenge. A blanket ban on vaping devices would not remove consumer demand for nicotine, nor would it eliminate the criminal networks distributing synthetic drugs. Instead, it would push

existing adult consumers away from regulated channels and hand the legal vape market over to the black market, potentially expanding illicit trade further. At the same time, such a ban would destroy the legal infrastructure through which the Government currently monitors, taxes, and controls the sale of nicotine products to adults.

3. The Regulatory Landscape and Its Shortcomings

Act 852 imposes a uniform set of obligations across all “smoking products”, comprising tobacco products (cigarettes), smoking substances (vapes and e-liquids), and substitute tobacco products (heated tobacco products). All three categories face identical pre-market registration, advertising bans, sales controls, pricing requirements, packaging standards, and public use restrictions.

This uniform treatment constitutes the central shortcoming of Act 852 in its current form. Cigarettes deliver nicotine through combustion at approximately 900°C, generating thousands of toxic compounds including tar and carbon monoxide. Vapes aerosolise nicotine without combustion. Heated tobacco products heat tobacco to approximately 350°C without combustion. Yet all are regulated identically. The Act’s failure to differentiate between fundamentally distinct risk profiles sends a misleading signal to consumers that all nicotine products are equally harmful and removes the incentive structure that would channel adult consumers toward lower-risk options.

The situation is more restrictive still for nicotine pouches, which are tobacco-free, smoke-free, and vapour-free oral products. These fall entirely outside Act 852’s scope and are classified as “medicinal poisons” under the Poisons Act 1952 and Control of Drugs and Cosmetics Regulations 1984. This classification subjects them to pharmaceutical licensing, pharmacy-only dispensing, and prescription barriers, despite their minimal risk profile.

The effectiveness of any regulatory framework depends not only on its legislative provisions but on its practical enforceability. Uniform restrictions that fail to reflect market realities can inadvertently encourage consumers to shift towards unregulated channels, weakening the Government’s ability to monitor products, retailers, and supply chains. They may also undermine public health objectives by limiting access for adult smokers who are unable or unwilling to quit, but who may otherwise switch to less harmful alternatives under a regulated framework.

4. Scientific Evidence for Risk-Proportionate Regulation

The scientific basis for differentiating nicotine products by risk profile is robust. The most substantial body of evidence concerns vaping. The Cochrane systematic review by Lindson and colleagues, updated through 2025 and covering over 100 studies (including 61 randomised controlled trials) with more than 30,000 participants, concluded with high certainty that nicotine e-cigarettes increase smoking cessation rates compared with traditional nicotine replacement therapies (NRTs) and behavioural support, with no evidence of serious adverse effects.[19][20]

Public Health England's 2015 assessment that vaping is approximately 95% less harmful than smoking has been upheld by subsequent independent reviews, including the UK Office for Health Improvement and Disparities' series analysing over 100 studies. Biomarker studies show that exclusive vapers achieve toxicant exposure levels comparable to never-smokers within days of complete switching.

Nicotine pouches expose users to toxicant levels comparable to NRTs and rank at the lowest end of the risk spectrum among oral nicotine products. Heated tobacco products expose users to substantially lower concentrations of harmful constituents than cigarette smoke across nearly all comparative studies. This evidence supports a clear policy conclusion: treating all nicotine products as regulatory equivalents to combustible cigarettes is scientifically unjustifiable.

5. International Benchmarks

Several nations have adopted risk-proportionate approaches with measurable results.

Sweden achieved smoke-free status when daily smoking among Swedish-born adults dropped to 4.5% in 2024. The 2025 CAN report confirmed a further decline to 4.8% in the general population aged 16–84, making Sweden the first world country below the WHO's 5% threshold. Sweden's success is attributed to widespread snus and nicotine pouch access combined with risk-based taxation.[21][22]

The United Kingdom recorded a record-low adult smoking rate of 10.6% in 2024, down from 20.2% in 2011, declining twice as fast as the EU average. E-cigarette users now outnumber smokers for the first time (5.4 million vapers versus 4.9 million smokers in Great Britain). Only 4% of never-smokers vape, confirming uptake is concentrated among current and former smokers.[23]

Japan saw cigarette sales drop over 50% since the 2014 introduction of heated tobacco products, with a 2024 modelling study estimating that 50% smoker switching to HTPs could avert 12 million tobacco-related illnesses by 2060. **New Zealand's** adult daily smoking rate declined from 16.4% in 2011/12 to 6.8% in 2022/23, during a period in which the country adopted a regulated harm-reduction approach and communicated that vaping could help adult smokers quit. Separately, **United Kingdom's** current smoking rate declined from 20.2% in 2011 to 10.6% in 2024, and introduced its Swap to Stop programme in 2023, offering eligible smokers free vape starter kits alongside cessation support. These developments suggest that vaping can form part of a broader tobacco-control strategy, but they do not prove that vaping alone caused the decline in smoking. **The Czech Republic** achieved the EU's sharpest recent decline (30%

to 23%, 2021–2024) under a framework with no excise on e-cigarettes. **Greece** reduced smoking from 42% to 36% by authorising scientifically substantiated health claims for smoke-free products.

Conversely, prohibition-based approaches have failed. Singapore's vape ban has driven use underground without eliminating it. Thailand's ban expanded illicit vaping. Australia, which pursued aggressive taxation without proportionate alternatives regulation, now faces an illicit cigarette market of 80% in 2025 rose from 17% in 2017, nearly identical to Malaysia's, alongside gang-linked violence and the prospect of rising smoking rates for the first time in decades.[24]

6. Fiscal and Economic Implications

The economic case against prohibition is compelling. Malaysia's legal vaping market recorded RM3.48 billion in retail turnover in 2023, supports 31,500 direct jobs, and generated RM288.45 million in excise tax revenue from 2021 to July 2025.[25] A ban would eliminate this revenue stream with no mechanism to capture equivalent revenue from the illicit market.

The Government is estimated to spend RM16 billion annually on smoking-related diseases. For every RM1 collected from tobacco excise duties, RM4 is spent on treating smoking-related illness.[26] Risk-proportionate reform offers a pathway to reduce this healthcare burden by accelerating smoker switching to less harmful alternatives, lowering long-term treatment costs while generating sustainable, differentiated tax yields.

The micro-business dimension is also significant. The Malaysian Micro Businesses Association (MAMBA) and the Federation of Sundry Goods Merchants Associations of Malaysia (FSGMAM) have warned that illicit cigarette sales are siphoning revenue from legitimate sundry shops, undermining the 97.4% of Malaysian business establishments that are MSMEs.[27] Any policy that expands illicit market share deepens this structural disadvantage.

Furthermore, the Budget 2026 cigarette excise increase, while the first in a decade and a step in the right direction, raises legal cigarette prices without a corresponding differentiated framework for less harmful alternatives. This widens the price gap between legal and illicit products and, without complementary reform, risks further illicit market growth.[28]

7. Why Blanket Prohibition Is Counterproductive

Prohibition would exacerbate rather than resolve Malaysia's nicotine governance challenges across every key dimension.

Enforcement. A legal, registered marketplace is the most potent instrument the state possesses for supply-chain monitoring. Banning vaping hardware dismantles this infrastructure and pushes the entire trade into channels where the Government loses all visibility over what is sold, to whom, and by what means.

Narcotics risk. Prohibition forces millions of existing nicotine users to source products from the same clandestine networks distributing narcotics, increasing the probability of accidental exposure to lethal synthetics. The Iron Law of Prohibition further compounds this: smugglers prioritise higher-potency, higher-density products, which is why illegal vapes in Malaysia already routinely exceed legal concentration limits.

Revenue. Products sold in the black market generate zero excise revenue. Prohibition eliminates the legal vaping market’s fiscal contribution while increasing enforcement expenditure.

Public health. Prohibition does not reduce smoking prevalence. It entrenches combustible cigarettes by removing the alternatives that enable switching. Regional experience from Singapore and Thailand confirms this.

Youth protection. Minors access products more easily through black markets, which lack age verification, than through regulated retail channels subject to ID checks and compliance monitoring.

The following comparison summarises the projected outcomes of the two available policy paths across the six dimensions most relevant to inter-ministerial decision-making.

Policy Dimension	Blanket Ban	Risk-Proportionate Reform
Illicit trade	Shifts demand to unregulated channels; expands black market share	Incentivises legal purchase; reduces illicit market share over time
Tax revenue	Collapses: illicit products pay no excise	Grows through differentiated, risk-proportionate excise structure
Smoking prevalence	Stagnates or rises: removes switching alternatives	Declines as adult smokers switch to less harmful regulated products
Youth protection	Weakens: black markets impose no age checks	Strengthens via mandatory ID scanners, fines, and NHMS monitoring
Enforcement costs	High: requires border interdiction and criminal network operations	Lower: primarily market monitoring and compliance enforcement
Narcotics exposure	Increases: consumers enter same channels as drug distributors	Contained: traceability and supply-chain integrity isolate narcotics networks

Across every dimension, risk-proportionate reform outperforms prohibition. This assessment is consistent with the empirical record from the international case studies presented in Section 5 and with the enforcement data from Malaysia’s own illicit market experience.

8. Policy Recommendations

The following recommendations are addressed collectively to KKM, MOF, KDN, KPDM, and the PMO. They are designed to be implemented as a coordinated package under a whole-of-government framework.

No.	Recommendation	Detail and Responsible Ministry
1	Withdraw blanket ban proposals	Withdraw the proposed blanket vape ban. Pause all restrictive legislative proposals pending a comprehensive cross-ministerial evidence review. KKM and PMO should issue public statements affirming the scientific basis of tobacco harm reduction within three months.
2	Establish a National Nicotine Regulation Coordination Council	Convene an inter-ministerial body (KKM, MOF, KDN, KPDM, PDRM, AADK, JKDM) to coordinate nicotine and enforcement policy. Quarterly reporting to the PMO. This addresses the policy coherence gap.
3	Adopt a National Tobacco Harm Reduction Strategy	KKM-led task force within six months to formally recognise vapes, HTPs, and nicotine pouches as lower-risk alternatives for adult smokers. Publish a white paper synthesising global evidence. Mandate annual prevalence tracking.
4	Amend Act 852 for risk-proportionate regulation	Within twelve months, amend Act 852 to regulate vapes, HTPs, and nicotine pouches differently from cigarettes. Bring nicotine pouches within Act 852 (removing them from pharmaceutical classification). Replace pre-market authorisation with notification-based compliance verification. Parliament.
5	Restructure excise taxation	Risk-proportionate rates: cigarettes retain highest excise. Vapes taxed at approximately 5% of cigarette excise; HTPs at approximately 10%; nicotine pouches at zero excise to incentivise the lowest-risk option. MOF.

6	Develop a supply-chain integrity framework	Mandate serialised traceability (batch-level tax stamps, real-time tracking) across the legal nicotine supply chain. Digital registration systems and product authentication technologies. KDN, JKDM, KPDN.
7	Target narcotics enforcement upstream	Redirect enforcement from retail hardware to chemical laboratories and distribution networks producing synthetic adulterants. Impose escalating criminal penalties for adulterated products. KDN, PDRM, AADK.
8	Permit substantiated health claims	Authorise factual, evidence-backed claims on packaging and in adult-directed communications for less harmful products. KKM.
9	Strengthen youth protection	Mandate ID scanners at point of sale. Substantial fines for non-compliant retailers. Ban youth-targeted packaging. Annual NHMS youth monitoring by ethnicity and region. KKM, KPDN.
10	Institutionalise periodic review	Regulatory Impact Assessments and parliamentary reviews at regular intervals. Annual NHMS reporting on prevalence, switching rates, and youth use with public dashboards. Target sub-5% smoking prevalence by 2036. KKM, PMO.

9. Conclusion and Call to Action

The implementation of Act 852 presents an important opportunity to strengthen Malaysia’s regulatory governance while advancing public health objectives. However, the complexity of the current policy environment requires a broader perspective than tobacco control approaches alone. Nicotine regulation now intersects with public health, consumer protection, law enforcement, fiscal policy, market governance, and national security.

Malaysia can pursue blanket prohibition, repeating the documented failures of Singapore, Thailand, and Australia, ceding market control to criminal syndicates while entrenching a 19% adult smoking prevalence. Alternatively, it can strengthen Act 852 through targeted, risk-proportionate amendments that bring the nicotine market into legal, taxable, quality-controlled channels, while deploying surgical enforcement against narcotics infiltration.

The evidence from Sweden, the United Kingdom, New Zealand, Japan, the Czech Republic, and Greece is unambiguous: countries that adopt harm reduction as a policy instrument achieve

faster declines in smoking prevalence, preserve fiscal revenue, maintain enforcement leverage, and protect public health more effectively than those that pursue prohibition.

The presence of narcotics in the vape supply chain does not justify the destruction of the regulated market. It justifies strengthening that market's integrity through traceability, enforcement, and severe penalties for adulterators. Banning the hardware will not stop the narcotics trade; it will merely remove the legal infrastructure through which the Government maintains marketplace visibility.

A whole-of-government framework offers the most practical pathway forward. By strengthening coordination, enhancing regulatory oversight, improving supply-chain transparency, targeting illicit networks, and institutionalising policy review, Malaysia can improve public health outcomes while simultaneously strengthening enforcement effectiveness, consumer protection, and regulatory accountability.

We respectfully urge the Government of Malaysia to convene a cross-ministerial review of these proposals, with a view to developing a coherent, evidence-based nicotine governance framework that achieves the objectives all stakeholders share: reducing smoking-related morbidity and mortality, protecting youth, suppressing illicit markets, and preserving the fiscal base.

Contact

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- [1]GATS-M 2023: overall smoking prevalence 19.0% among adults 15+. [PMC/Tobacco Induced Diseases. Nov 2025](#)
- [2]NielsenIQ Illicit Cigarettes Study 2025: 56.7% national illicit incidence. [The Star. 21 May 2026](#)
- [3]RM5 billion annual excise revenue loss, confirmed by Deputy Finance Minister. [Tobacco Reporter. 16 June 2025](#)
- [4]Ops Vape 1.0: furanylfentanyl seized at vape outlets. [The Star. 21 Apr 2026](#)
- [5]Galen Centre: RM16 billion annually on smoking-related illness; RM1 tax : RM4 treatment. [CodeBlue. Aug 2025](#)
- [6]Control of Smoking Products for Public Health Act 2024 (Act 852). Gazetted 2 Feb 2024, enforced 1 Oct 2024. [FMT. 25 Sept 2024](#)
- [7]WHO FCTC 2025 Malaysia Status Report. [WHO FCTC Extranet](#)
- [8]NielsenIQ Illicit Cigarettes Study 2025 (commissioned by CMTM). [Tobacco Reporter. 27 Feb 2026](#)
- [9]Budget 2026: cigarette excise raised 2 sen/stick from 1 Nov 2025. [The Edge. 10 Oct 2025](#)
- [10]BAT Malaysia raises prices post-Budget 2026 excise hike. [The Edge. 18 Nov 2025](#)
- [11]Cebu factory raid targeting Malaysian illicit cigarette market. [The Rakyat Post. 24 Apr 2026](#)

- [12]Op Vape 1.0: furanylfentanyl seized at vape premises. [Sinar Harian, 21 Apr 2026](#)
- [13]Drug-laced vape crackdown intensified after viral incidents. [The Vibes, 20 May 2026](#)
- [14]Cannabis-laced vape cartridges seized in Sarawak. [Dayak Daily, 23 Apr 2026](#)
- [15]96 investigation papers on drug-laced vape liquids. [NST, May 2026](#)
- [16]Cabinet agrees in principle to vape ban. [The Star, 17 Dec 2025](#)
- [17]MOH targets open-system vape ban in 2026. [Malay Mail, 6 Jan 2026](#)
- [18]Tobacco Asia: Malaysia vape ban analysis. [Tobacco Asia, Apr 2026](#)
- [19]Lindson N et al. Electronic cigarettes for smoking cessation. Cochrane Database Syst Rev 2024;1:CD010216. [Cochrane Library](#)
- [20]Lindson N et al. updated Cochrane Review 2025 (pub10). [Cochrane Library, Nov 2025](#)
- [21]Sweden 4.8% daily smoking in 2025 (CAN report). [Medical Xpress, 26 May 2026](#)
- [22]Sweden 4.5% among Swedish-born adults (2024 data). [Smoke Free Sweden, 13 Nov 2024](#)
- [23]UK adult smoking falls to 10.6% in 2024, record low. [ONS, 4 Nov 2025](#)
- [24]Australia's illicit cigarette rate ~80%, worse than Malaysia. [Australian Bureau of Statistics](#)
- [25]MVCC Industry Study 2023: retail value RM3.48 billion, 31,500 jobs. [CodeBlue, 21 Aug 2023](#)
- [26]Galen Centre: RM16bn annual smoking-related healthcare cost. [CodeBlue, 11 Aug 2025](#)
- [27]MAMBA: illicit cigarettes siphoning sales from legitimate SMEs. [Focus Malaysia, 11 Mar 2026](#)
- [28]Budget 2026 cigarette excise increase. [The Edge, 10 Oct 2025](#)