

This article has been accepted for publication in *Tobacco Control* following peer review. The definitive copyedited, typeset version Chew A, Davila G, Moodie C, et al. Iluma-nating: IQOS variant enters the Guatemalan market. *Tobacco Control* Published Online First: 10 June 2024 is available online at: <https://doi.org/10.1136/tc-2024-058722>
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Title: Iluma-nating: IQOS variant enters the Guatemalan market

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Word count: 466

IQOS, the Philip Morris International (PMI) flagship heated tobacco product (HTP), is now available in 82 countries (1-3). According to PMI's 2023 fourth quarter results, IQOS has overtaken Marlboro on net revenues (4). Scant research is available on youth's HTPs perceptions – including in Guatemala. Among 16–19-year-olds in England, Canada and the USA, susceptibility to trying IQOS has been found to be higher than for cigarettes (5). In Guatemala, adolescent HTPs use has been found to be low, yet susceptibility to use is high, suggesting that tobacco use prevention strategies should also include HTPs (6, 7). Furthermore, Guatemala faces the challenge of increased accessibility for adolescents and exposure to unregulated tobacco marketing (8).

Several variants of IQOS are now available since it was first marketed in 2014. One example is IQOS Iluma, launched in Japan in 2021. Iluma has an auto-start feature to detect the 'Terea' or 'Sentia' sticks (developed for the device) and includes 'Smartcore Induction System' technology to generate heat from within. As it does not require a 'heat blade' to heat tobacco and leaves no tobacco residue or ash, the IQOS Iluma is advertised as "a more pleasurable experience" (9). PMI's goal is to have Iluma in 100 countries by 2025 (10). In Guatemala it was introduced in 2024 through Tabacalera Centro Americana, a PMI subsidiary. As with IQOS, Iluma was introduced as part of PMI's Guatemala so-called 'smoke-free' campaign. (11, 12)

Iluma exemplifies how the industry is constantly innovating, making product restrictions and regulations an ongoing challenge, particularly for countries with weak tobacco control like Guatemala. This country has experienced systematic industry interference (13) explaining, in part,

the weak tobacco control policies implemented. This positions Guatemala as an attractive market to introduce new products targeting different socio-economic status consumers. Consequently, this country was among the first in Latin America where PMI launched Iluma device. In Colombia it was introduced in February (14) followed by México in April 2024 (15).

In addition to Iluma, PMI introduced two less expensive options than IQOS in Latin America, Lil Solid (in partnership with the Korean company KT&G) and Bonds (16). The market in this region, and many other countries, is likely to diversify further with the introduction of Levia, compatible with Iluma devices. Levia is a tobacco-free stick made with a non-tobacco substrate, is part of the range of nicotine-infused Herbal Heated Products (HHPs) and available in different flavours (17, 18). It is important to understand what adolescents perceive about these emerging nicotine and tobacco products in a market such as Guatemala with a high non-urban population, and where education levels are low.

Contributors AC wrote the first draft of the manuscript. GD, CM, JT and JB contributed to edits and final revision of the manuscript.

Funding This work is part of the ‘Removing the Marketing Power of cigarettes’ (REMAP) Project, funded by the Medical Research Council (MR/X004279/1).

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

1. Philip Morris International. Philip Morris International submits applications to commercialize IQOS ILUMA tobacco heating system to U.S. Food and Drug Administration. www.pmi.com/media-center/press-releases/press-details?newsId=26891#:~:text=As%20of%20September%2030%2C%202023,third%2Dquarter%202023%20net%20revenues [Accessed: 7 February 2024]
2. Centers for Disease Control and Prevention. Heated tobacco products. 2 November 2023. www.cdc.gov/tobacco/basic_information/heated-tobacco-products/index.html#what-are-heated-tobacco-products [Accessed: 7 February 2024]
3. Tobacco Tactics. Heated tobacco products. 6 February 2024. <https://tobaccotactics.org/article/heated-tobacco-products/> [Accessed: 7 February 2024]
4. Philip Morris International. Philip Morris International's heated tobacco product IQOS replaces Marlboro as its leading brand; 9 February 2024. www.pmi.com/our-transformation/philip-morris-international-s-heated-tobacco-product-iqos-replaces-marlboro-as-its-leading-brand#:~:text=%E2%80%9CThis%20was%20led%20by%20the,than%2010%20years%20from%20launch.%E2%80%9D
5. Tattan-Birch H, Hartmann-Boyce J, Kock L, Simonavicius E, Brose L, Jackson S, Shahab L, Brown J. Heated tobacco products for smoking cessation and reducing smoking

- prevalence. *Cochrane Database Syst Rev.* 2022 Jan 6;1(1):CD013790. doi: 10.1002/14651858.CD013790.pub2. PMID: 34988969; PMCID: PMC8733777.
6. Monzón J, Islam F, Mus S, et al. Effects of tobacco product type and characteristics on appeal and perceived harm: Results from a discrete choice experiment among Guatemalan adolescents. *Prev Med* 2021;148:106590.
 7. Gottschlich A, Mus S, Monzon JC, et al. Cross-sectional study on the awareness, susceptibility and use of heated tobacco products among adolescents in Guatemala City, Guatemala. *BMJ Open* 2020;10:e039792.
 8. Barnoya J, Monzon J, Pinetta J. New tobacco products, old advertising strategies: point-of-sale advertising in Guatemala. *Tob Control* 2021;30,5:591-3.
 9. Phillip Morris International. Philip Morris International launches new IQOS ILUMA in Japan to accelerate the achievement of a smoke-free future. www.pmi.com/media-center/press-releases/press-details?newsId=24261 [Accessed: 7 February 2024]
 10. Phillip Morris International. Heated tobacco products. www.pmi.com/our-business/smoke-free-products/heated-tobacco-products [Accessed: 7 February 2024]
 11. Seidenberg A, Freeman B. IQOS is not an acronym: a call to researchers and journals. *Tob Control* 2021;30:356-8.
 12. Prensa Libre Guatemala. IQOS ILUMA llega a Guatemala como una mejor opción para adultos fumadores. www.prensalibre.com/c-studio/iqos-iluma-llega-a-guatemala-como-una-mejor-opcion-para-adultos-fumadores/ [Accessed: 7 February 2024]
 13. Global Tobacco Index. Guatemala. <https://globaltobaccoindex.org/country/GT> [Accessed: February 7 2024]

14. Forbes Colombia. Una experiencia al siguiente nivel: Así se vivió el lanzamiento del nuevo IQOS ILUMA en Colombia. <https://forbes.co/2024/02/16/actualidad/una-experiencia-al-siguiente-nivel-asi-se-vivio-el-lanzamiento-del-nuevo-iqos-iluma-en-colombia> [Accessed February 7 2024]
15. Noticias NEO. Philip Morris México lanza IQOS ILUMA, tecnología para un futuro sin humo. <https://www.noticiasneo.com/articles/2024/04/23/philip-morris-mexico-lanza-iqos-iluma-tecnologia-para-un-futuro-sin-humo> [Accessed February 7 2024]
16. Monzon J, Mus S, Davila G, et al. Lil Solid: a more affordable option for heated tobacco products in Guatemala. Tob Control, forthcoming.
17. Rossel S. designing the future. Tob Reporter 2023;4:41-3.
18. Rossel S. Burgeoning botanicals. Tob Reporter 2024;2:34-6.