iQOS, E-Cigarettes, and Tobacco Control

Harm Reduction the Japanese Way

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What can we learn from the Japanese government’s approach to the regulation of ENDS?

• How are e-cigarettes and heat-not-burn products regulated?
• Why has the government taken that regulatory path?
• What impact has it had?
• Should it be emulated?
Why Japan?

* Wealthy, Industrialized, Democratic
* Historically high smoking rates
* Targeted regulatory strategy
* Test market for iQOS
* Fast adoption of new technology
1904-1985: Tobacco Monopoly operated by the Government of Japan

1985: Japan Tobacco Inc. is established
Smoking Rates in Japan, 1960-2015
Domestic vs Imported Tobacco Sales in Japan 1982-2014

Nicotine

C_{10}H_{14}N_{2}

Ministry of Health, Labour and Welfare

Ministry of Finance Japan
Introduction of Heat-Not-Burn (HNB) Tobacco Products in Japan

December 2016: British American Tobacco

November 2014: Philip Morris International: iQOS

March 2016: Japan Tobacco, Inc: Ploom TECH

December 2016: British American Tobacco, glo
PMI Estimate of iQOS Share of Japan’s Tobacco Market

Japan: HeatSticks National Market Share (%)

December 2015: 0.4%
December 2017: 14.1%

PMI: Net Revenues from iQOS, 2014-2017

Contribution to Total Net Revenues

2.7%  
12.7%

3,640

RRP Net Revenues ($ million)

2014 2015 2016 2017

JT Estimate of HNB Market Share
2016-2020

“JT Reduced-Risk Products Business Overview,” March 2018
# PMI Expectation of Future Revenue

<table>
<thead>
<tr>
<th>(billion units)</th>
<th>Actual 2017</th>
<th>Aspiration(^{(a)}) 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke-Free Product Volume(^{(b)})</td>
<td>36</td>
<td>&gt;250 Approx. 4% of PMI total volume</td>
</tr>
<tr>
<td>Combustible Product Volume(^{(c)})</td>
<td>791</td>
<td>&lt;550 &gt;30% of PMI total volume</td>
</tr>
</tbody>
</table>

\(^{(a)}\) Assuming constant PMI market share outside China and the U.S. We do not set aspirational targets for R&D and commercial expenditure but we expect both ratios to continue increasing to enable the stated outcome in terms of shipment volume.

\(^{(b)}\) For 2017, smoke-free products volume includes heated tobacco units only.

\(^{(c)}\) Includes cigarettes and other combustible tobacco products.

Source: PMI Financials or estimates, and PMI Communication on Progress 2016 United Nations Global Compact.

PMI Stock Price Drops After Announcing Slower iQOS Sales in Japan April 19, 2018

iQOSを選ぶ それとは煙のない未来を選ぶこと

IQOSの香ばしい味わいを支えるのは、
最先端のサイエンス。通常の紙巻たばこの
煙と比べてIQOSのたばこペイパーは、
9種類の有害性成分の量を約90%カット
することが実証されています。

1. 有害性成分の量の低減率（平均）

約 90% 低減

IQOSのたばこペイバーは、紙巻たばこの煙より
素早く消え、屋内環境に悪影響を及ぼしません。

(iQOSを使用したエアクオリティテスト) 実証済み:

IQOSはスッキリないというわけではありません。

紙巻たばこの煙を吸うよりも健康的な一歩の方法は、
紙巻たばこもiQOSも選んでみることです。
Point of Sale Displays
E-Cigarettes with Nicotine Unavailable in Japan
- The Health Promotion Act (HPA, 2002) stipulates that operators of offices, restaurants, hotels, and other establishments “make efforts” to prevent secondhand smoke, and imposes no penalty on violators.

- Proposed amendments to HPA (2018) allow HNB products to be used where combustible tobacco is banned.

- HNB manufacturers are working to ensure that their products can be used in facilities that prohibit the use of combustible tobacco products.

- More than 800 restaurants in Tokyo have put up signs like these.
Designated Smoking Areas
ケータイ灰皿。持つべきだったと、捨てるとき思う。
Every time I finish smoking a cigarette, I realize that I should have brought a portable ashtray with me.

煙の行方。
本人だけが、
他人事だった。
Where does the smoke go? Only the person producing it is unconcerned.

オナラの時の後方確認。
たばこの時は忘れてた。
Before passing gas I look behind me. But I don't bother when I'm smoking.

自分のたばこは、カオルもの。
人のたばこは、ニオウもの。
My cigarettes smell good. Other people's smell bad.

約半歩
遠ざかるのは、
すれちがう人の
抗議かも。
When someone walks a step away from me, maybe it's a silent complaint about the cigarette in my hand.
iQOS Retail Store and Lounge
Ginza, Tokyo

2016: 22 Stores worldwide
2017: 62 Stores worldwide
Ploom TECH Retail Store & Lounge, Tokyo
Harm Reduction?

害の軽減 (ハームリダクション)
Tax on Combustible vs HNB Tobacco Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Tax Burden</th>
<th>Retail Price per Pack</th>
<th>Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional cigarettes</td>
<td></td>
<td>¥277.5</td>
<td>¥440</td>
</tr>
<tr>
<td>IQOS HeatSticks</td>
<td>¥226.3</td>
<td></td>
<td>¥460</td>
</tr>
<tr>
<td>Philip Morris International</td>
<td></td>
<td></td>
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<tr>
<td>glo Neostiks</td>
<td>¥151.1</td>
<td></td>
<td>¥420</td>
</tr>
<tr>
<td>British American Tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ploom Tech capsule pack</td>
<td>¥68.4</td>
<td></td>
<td>¥460</td>
</tr>
<tr>
<td>Japan Tobacco</td>
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<td></td>
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</tbody>
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Note: ¥440 equals about $3.91 as of Nov. 21
Source: Ernst & Young and Japan’s parliament

Bloomberg
Thank you for your attention