

The Union

International Union Against
Tuberculosis and Lung Disease
Health solutions for the poor

THE UNION'S POSITION ON HEAT-NOT-BURN (HNB) TOBACCO PRODUCTS

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The new generation of tobacco products

Tobacco use causes more than 7 million preventable deaths each year.¹ The tobacco industry has a long history, dating back decades, of stoking the smoking epidemic by introducing "reduced risk" products, beginning with filtered cigarettes in the 1920s with intensive promotion that started in the 1950s, followed by "low tar" cigarettes and a variety of other product modifications to allay the rising public concerns about the dangers of smoking. All these products were introduced and promoted to maintain industry profits, including Electronic Nicotine Delivery Systems (or ENDS, mainly e-cigarettes).^{2 3}

The tobacco industry has now started marketing heavily the latest generation of Heat-Not-Burn (HNB) tobacco products. HNB tobacco products heat sticks made of compressed processed tobacco and other chemicals to a high enough temperature to generate an inhalable aerosol that contains nicotine along with many other chemicals. HNB tobacco products differ slightly from ENDS, which create a nicotine aerosol by heating a liquid. Both HNB tobacco products and ENDS are designed to deliver an aerosol of nicotine deep into the lungs using a behaviour that mimics the physical act of smoking. The ultrafine particles that comprise the aerosol that delivers nicotine increase the risk of lung and heart diseases.^{4 5}

There are currently no independent estimates of the number of consumers using HNB tobacco products. Phillip Morris International (PMI) claims that iQOS (PMI's flagship HNB tobacco product) has more than 1.4 million regular users.⁶ PMI also claims that since the launch of iQOS in the UK in December 2016, 70 % of its users have been able to quit cigarettes.⁷

Tobacco companies are adding HNB tobacco products to their portfolio of nicotine delivery products and are aggressively promoting these as products of "lower risk" and as devices for cessation. PMI has included harm reduction as a core corporate strategy⁸ and claims that adopting new technologies such as HNB tobacco products could save lives of millions of current smokers in the future. British American Tobacco (BAT) launched its latest HNB brand glo in Japan in 2016, claiming

that it produces 90% less toxicants than a conventional cigarette.⁹ R. J. Reynolds was the first tobacco company to produce a HNB brand Premier in 1988 and the brand was subsequently relaunched in several variations. BAT saw its acquisition of R. J. Reynolds in 2017 as an opportunity to create "a stronger, global tobacco and Next Generation Products company committed to delivering sustained long-term profit growth and returns."¹⁰ Japan Tobacco International is also aggressively promoting its new product Ploom Tech to gain a share of the market in Japan, which it lost to PMI.¹¹

PMI claims that in the future it plans to replace conventional cigarettes with reduced risk products such as HNB tobacco products. It also launched the "Foundation for a Smoke-free World" to support research on harm reduction with the ultimate goal of "eliminating smoking worldwide"¹² primarily by promoting these new products. It has been well documented that PMI and other tobacco industry actors have for decades been establishing similar entities to protect themselves from litigation threats and government regulation by distributing questionable science to distract from the irrefutable evidence of the death and disease caused by tobacco.¹³ PMI and other tobacco companies' assurances that they want to reduce use of combusted cigarettes ring hollow while they continue to aggressively promote cigarette smoking and block the implementation of the WHO Framework Convention on Tobacco Control (FCTC)¹⁴ around the world.¹⁵

Industry research dominates published literature on HNB tobacco products

The current published literature on the health impact of HNB tobacco products is dominated by Industry-sponsored research that unequivocally concludes that HNB tobacco products pose a lower risk than cigarettes. These studies claim that, under experimental settings, HNB tobacco products release as much as 90 to 95% less harmful and potentially harmful constituents.^{16 17}

A peer-reviewed paper published in September 2017 by investigators independent from the tobacco industry found that the aerosol released from iQOS had higher levels of harmful constituents than PMI reported.¹⁸ True to the industry's behaviour in the past, PMI attacked this research and the institutions where the researchers were based.¹⁹

Another peer-reviewed independent publication investigated the health effects of HNB tobacco products. This case study reported details of a patient who contracted acute eosinophilic pneumonia (AEP) two weeks after increasing the smoke amount from 20 to 40 HNB cigarettes per day. The

authors attributed the patient's AEP to the rapid increase in the amount of HNB aerosol inhalation and associated antigens.²⁰ This finding raises a potential risk of HNB tobacco products that has not yet been identified in studies presented by the industry. Prior studies of past HNB products (such as RJR's Eclipse) done independently of the tobacco company found no evidence that they were less harmful than combustible cigarettes.²¹

An independent study of second-hand emissions from HNB tobacco products shows that, while at lower levels than a conventional cigarette, HNB tobacco products still pollute the air around people using the products, creating second-hand exposure.²²

Legislation and Regulatory Responses

There have been a range of policy responses to HNB tobacco products across the world, ranging from no regulations, softer variations than tobacco regulations, similar regulations as tobacco products and complete bans.

One example of current legislation is New Zealand, where the sale and distribution of HNB tobacco products are prohibited. This has been achieved by categorising HNB tobacco products as non-smoked items under oral tobacco products, which are banned under New Zealand law.²³ In Germany, HNB tobacco products can be purchased and are categorised under the legislation for pipe tobacco as, unlike cigarettes, they require a device to be used. The pipe tobacco category has a 75% lower tax rate than cigarette tax and does not require a graphic health warning on packaging. On the other end of the spectrum, Japan – unlike their stance on ENDS, which are prohibited – HNB tobacco products can be legally sold and distributed, are not regulated and can be used in smoke-free areas.

The European Union (EU) has not yet adopted a policy on HNB tobacco products. According to the EU, HNB heat sticks are considered to be tobacco products and therefore advertising for heat sticks (but not heating devices) should be prohibited.²⁴ However, the EU are reviewing the decision as to whether HNB tobacco products should be classified as smoking products or novel tobacco products. If HNB tobacco products are accepted as novel tobacco products after review, they will not be subject to restrictions on flavours and packaging, and will be subject to softer health warnings than conventional cigarettes. However, if HNB tobacco products are classified as smoking products,

regulations will prohibit flavours, enforce plain packaging and place a restriction on emissions including carbon monoxide and tar.²⁵

The Union's position

1. The potential benefits and risks from HNB tobacco products to the public health remain undetermined but early independent research indicates that the tobacco companies are understating the risks. The Union recommends that governments apply the precautionary principle to the regulation of HNB tobacco products. Countries should wait for independent assessment of the health effects of HNB tobacco products and not simply take industry assertions at face value before allowing the sale of these products.
2. Governments should ban indoor HNB use because the aerosol released from HNB tobacco products contain many of the harmful constituents found in cigarette smoke. There are likely health risks from being exposed to second-hand aerosol of HNB tobacco products.
3. Advertising, promotion, and sponsorship activities of HNB tobacco products should be banned as they have the potential to glamorise cigarette smoking. Children and adult non-smokers are at the risk of being led into nicotine addiction and subsequently smoking cigarettes or using other tobacco products.
4. HNB tobacco products should be incorporated in the regular monitoring framework of tobacco use in the country.
5. In countries where HNB tobacco products are already available, governments should also prohibit claims that these products assist in smoking cessation until independent evidence at both individual and population levels is available that this claim is accurate. The potential of HNB tobacco products to reduce willingness to quit smoking and the impact of dual use with cigarettes should also be independently assessed.
6. Tobacco industry should not be involved in the discussions of HNB tobacco products policies or any other tobacco control policies. Such involvement is a violation of the WHO FCTC Article 5.3 and its Guidelines.

(This position statement was prepared by Pranay Lal, Daouda Adam, Anne Jones, Rana Singh, Tara Bam, Fouad Aslam, Syed Mahbubul Alam, Michelle Reyes-Palmones, Hanbing Guo, Mirta Molinari, and Gan Quan. We would like to thank the contribution by Mithun Nair, Nadia Freeman, Mairi Benson, and Angela Jackson-Morris to an early draft and the review by Stanton Glantz, Pamela Ling, Mike Daube, and Maciej Goniewicz.)

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