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HEATED TOBACCO PRODUCTS: DEFINITIONS AND GLOBAL MARKETS

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WHAT ARE HEATED TOBACCO PRODUCTS (HTPS)?

Heated tobacco products (HTPs) are tobacco products that require the use of an electronic device to heat an insert or pod of compressed tobacco (tobacco insert). Inserts come in flavors including menthol, vanilla, and a variety of fruit flavors. When in use, the tobacco insert is heated to a temperature high enough to produce smoke. Though HTPs are promoted by the tobacco industry as “heat-not-burn” and “smokeless” products, HTPs do emit smoke and contain compounds found in conventional cigarette smoke. Though HTPs make up a small fraction of the global tobacco market (3.48%), their share is rapidly growing.

HEATED TOBACCO PRODUCTS PRODUCE TOXIC EMISSIONS

Many of the chemicals found in cigarette smoke are also found in the smoke emitted from HTPs. Chemicals found in smoke from HTPs include compounds like carbonyls, nitrosamines, carbon monoxide, and other volatile compounds.[1] Exposure to these compounds has a range of adverse health effects including cancer, respiratory, and cardiovascular disease, and adverse reproductive and developmental outcomes. It is clear that HTPs produce toxic emissions and should be strongly regulated to minimize their use and exposure to these emissions.

IQOS device and insert manufactured by Philip Morris International (PMI)

IQOS device and insert manufactured by Philip Morris International (PMI) (left). glo device and insert manufactured by British American Tobacco (BAT).

HEATED TOBACCO PRODUCT BRANDS

Some of the largest HTP brands are *IQOS* manufactured by Philip Morris International (PMI), *glo* produced by British American Tobacco (BAT), and *lil* produced by Korean Tobacco and Ginseng (KT&G). Manufacturers periodically release brand variants and updated versions of their devices.

IQOS

- *IQOS* launched in Japan in 2014 and is now sold in at least 64 countries/markets.[2] In 2022, *IQOS* held 61.0% of the global heated tobacco device market volume and 43.4% of the global heated tobacco inserts market volume.[3]
- *IQOS* inserts are branded as *HeatSticks* or Marlboro *HEETS*. In 2022, shipment volume for *HEETS* grew by 21.5%.[4]
- The original *IQOS* includes a portable battery pack that recharges the heating device after each use. In 2021, PMI launched *IQOS* variants, *ILUMA* and *ILUMA Prime* in Japan. These devices use only *Terea Smartcore* inserts.[5] PMI's *Terea* inserts represented 17.8% of the global heated tobacco inserts market volume in 2022.

glo

- *glo* launched in 2016 and is now sold in at least 21 markets. Europe represents 54% of *glo*'s volume and 51% of *glo*'s revenue.[6]
- In 2022, the *glo* device represented 15.3% of the global heated tobacco device market volume.[3] *glo* inserts are branded as Kent *Neostiks* or *Neo* in most countries and in 2022, *glo*'s inserts held 15.6% of the heated tobacco insert market volume.[3] In 2022, volume of Kent *Neo/Neosticks* increased by 25.6% compared to the previous year.[6]
- The *glo* heating device holds enough charge to heat several inserts and does not have a separate battery pack.

lil SOLID

- *lil* launched in 2017 and is currently available in at least 31 markets.[7] It held 5.7% of the global heated tobacco insert market volume in 2022.[2]
- In 2023, KT&G entered a fifteen-year partnership agreement with PMI to expand its *lil* HTP line in the global market. PMI is also licensed to market *lil SOLID 1.0* and *lil SOLID 2.0*.
- *lil* uses *Fiit* tobacco inserts. In 2022, KT&G sold 5.3 billion *Fiit* inserts, up more than 1.5 billion from the previous year (3.6 billion inserts sold in 2021).[3]

Other tobacco companies with HTPs that have more limited availability are Japan Tobacco International (JTI), manufacturer of *Ploom TECH*, China National Tobacco with *Mok*, and Imperial Brands with *Pulze*.[8]

A NOTE ABOUT TECHNOLOGY

Most HTPs heat tobacco directly, including the market leaders *IQOS* and *glo*. These types of HTPs heat the tobacco to between 240C and 350C depending on the brand.[1,9] Some other HTPs, like *Ploom TECH* and *lil Hybrid*, employ a "hybrid" technology that first heats an e-liquid that, in turn, heats the tobacco. These hybrid devices heat the tobacco to around 30-40C.[10]

The Ploom TECH device featured above uses a hybrid technology that uses both e-liquid and an insert.

THE GLOBAL HEATED TOBACCO PRODUCT MARKET

- HTPs are available in at least 57 markets/countries across Europe, North and South America, Eurasia, and East Asia. The market for HTPs in Africa and the Middle East is small but growing, with the market value of HTPs increasing by almost 43% between 2021 and 2022.[3]
- The value of the global HTP market was USD $32.4 billion in 2022, with 150 billion tobacco inserts sold.[2] Heated tobacco products represent 3.48% of the world's total tobacco market value.[3]
    - In Japan, HTPs accounted for 35.2% of the total tobacco market value.[3]
    - The tobacco companies' focus on Japan and subsequent growth of the Japanese HTP market are attributable in part to limited restrictions on tobacco advertising and promotion, a consumer interest in technology and new products, and the de facto ban on electronic cigarettes (a separate category of emerging tobacco products).
- In 2022, Italy was the second most valuable HTP market, worth USD $4.1 billion.[3] From 2021 to 2022, the value of the HTP market saw a 24.2% increase.[3]
    - PMI's *IQOS* was soft launched in Milan in December, 2014, and became available nationwide the following year.
    - *IQOS HEETS* were the most sold brand of inserts in Italy in 2022. PMI's *HEETS* represented 86.0% of the HTP insert market volume in Italy.[3]
- The overall value of the European HTP market in 2022 was USD $16.1 billion, representing 49.7% of the global HTP market value.[3] The largest European markets for HTPs in 2021 were Italy (the second largest market globally, worth USD $4.1 billion); Russia (USD $2.9 billion); and Germany (USD $2.0 billion).[2]

FUTURE PROJECTIONS FOR HEATED TOBACCO PRODUCTS

- The global HTP market, valued at USD $32.4 billion in 2022, is projected to be worth $77.2 billion by 2027.[3] Sale volume is projected to increase by 79.3% (149.6 billion inserts to 268.3 billion) during that same period.
- PMI has said that by 2025, it aims for 50% of total net revenue to come from "smoke-free" products.[11]
- In July 2022, BAT's new product, *glo hyper X2*, was launched in Japan, with separate launch dates in-store and online. *glo* falls within BAT's "New Categories" portfolio, which also includes e-cigarette *Vuse* and nicotine pouch *Velo*. The category is reportedly on track to reach EUR €5 billion in revenue by 2025.[6]

KEY POINTS

- **Heated tobacco products are integrated systems that consist of an insert and an electronic device which heats the tobacco to a high enough temperature to produce smoke.**
- **All of the major multinational tobacco companies have heated tobacco product brands.**
- **Evidence for the effectiveness of e-cigarettes for cessation is inconclusive, especially under real world conditions.**
- **IQOS, owned by Philip Morris International, is the market leader in heated tobacco products globally.**
- **The heated tobacco market is small but quickly growing in markets around the world including countries in the Middle East and Africa. From 2022 to 2027, the market volume of heated tobacco inserts is projected to grow by almost 80%.**

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