

Consumers' perception study on tobacco heating products (thp) and vaping (e-cigarettes)

4th edition, 2023

Advancing Tobacco Harm Reduction

Tobacco Harm Reduction is a public health strategy that recognizes the harm caused by combustible cigarettes and aims to minimize the health impacts of cigarette smoking by encouraging those adult smokers who would otherwise continue to smoke, to switch completely to scientifically substantiated, reduced-risk alternatives*. Beyond being less risky, these alternatives must deliver comparable satisfaction, and their functionalities, usage and scientific evidence to be communicated accurately.

We have a clear purpose: To build A Better Tomorrow™ by reducing the health impact of our business

As an organization, BAT is committed to building A Better Tomorrow™ by reducing the health impact of its business. BAT invests more than £300 million per year to develop new tobacco and nicotine products and to ensure that they evolve as the technology, science and consumer preferences change. To accelerate the next phase of our transformation journey, we are now committing to 'Building a Smokeless World', with 50% of our revenue from non-combustible products by 2035. We will deploy our global multi-category portfolio with a wide range of enjoyable and less risky products to actively encourage smokers to 'Switch to Better' nicotine products.

BAT has developed a range of New Category products that contain nicotine but do not burn tobacco. This results in far fewer and lower levels of toxicants compared to traditional cigarette smoke. While not risk-free, the available evidence suggests they are less risky* than continuing to smoke. BAT's three New Category products are: vapor - VUSE, tobacco and herbal heating products - glo, and modern oral (nicotine pouches) - VELO.



Royal College
of Physicians

“ As most of the harm caused by smoking arises not from nicotine but from other components of tobacco smoke, the health and life expectancy of today's smokers could be radically improved by encouraging as many as possible to switch to a smoke-free source of nicotine. ”

UK Royal College of Physicians¹

¹ Nicotine without smoke: Tobacco harm reduction, UK Royal College of Physicians, <https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction>

BAT's reduced risk* products

Since launching our first e-cigarette in the UK in 2013, BAT has made impressive progress, now offering an unrivalled range of innovative and exciting products in more than 60 countries around the world. In 2022, we have invested more than £2 billion in our New Category products.

BAT has over 1,600 R&D specialists generating world-class science in areas such as chemistry, toxicology, clinical trials, and population modelling, committed to developing a wide range of tobacco and nicotine products that offer adult smokers around the world less risky alternatives to smoking. They have published more than 150 peer-reviewed studies on our New Categories based on the nine-step risk assessment framework.



Vapor products are battery powered devices that heat e-liquid to produce an inhalable aerosol (vapour). There is growing consensus among the public health community and academia about the role of vapour products as a reduced-risk* alternative to smoking. This is supported by a wealth of global reviews, studies and reports.

Tobacco Heating Products (THPs) are devices that heat tobacco to generate an aerosol. Due to the heating of tobacco, as opposed to burning, THPs are reduced risk* compared to continued smoking for those who switch completely. To date, much of the available research on THPs has been conducted by industry scientists, however an increasing number of independent reports are aligned with our findings and support the role of THPs as a less risky* alternative to smoking. For example, in 2018, Public Health England**, while highlighting the need for more research, found that “compared with cigarettes, heated tobacco products are likely to expose users and bystanders to lower levels of particulate matter, and potentially harmful compounds.”²

Modern oral nicotine products are disposable nicotine pouches that consumers place between their gum and upper lip, typically for around 30 minutes. Nicotine and flavours are released to be absorbed through the oral mucosa.

+£2 billion

invested in the development of the new categories of BAT products

+1.600 R & D specialists

generate relevant studies and research

+150 studies

evaluated by independent experts

Why did BAT commission this consumer perception study?



Our commitment to reducing the health impact of our business is helping to deliver ground-breaking scientific advances and supports consumer choice. The results of tests and studies we have conducted have generated evidence that supports our belief that heating tobacco and vaping products are reduced-risk* products compared to continuing to smoke cigarettes. The testing includes behavioral, chemical, biological, clinical and population studies.³

However, it's vital to recognize the important role consumers' perceptions play, to understand their perspective and also their expectations for alternatives to smoking. As a consumer-centric business, BAT is committed to offering adult smokers viable alternatives such as glo, our innovative tobacco and herbal heating product, and Vuse, our vaping product, and contribute to tobacco harm reduction strategies. Therefore, in 2019, 1 year after glo was launched in Romania, IRES, one of Romania's most reputed research institutes, was commissioned to ask adult Romanians that have been using THP (and glo specifically) for more than 6 months if they perceive any difference versus when they were smoking cigarettes. In 2021 and 2022, the study was repeated to see how the perceptions evolved over time. In 2023, we extended our focus from THP consumers and added in the study the vaping users.

The results are relevant: the consumers' perception is similar to the scientific findings on reduced risk* products, i.e. that these products have a reduced-risk profile compared to smoking cigarettes.

BAT hopes that taken together, the science and the voice of the consumers, will help better inform smokers, regulators, and public health bodies on the potential for reduced risk* products to contribute to tobacco harm reduction strategies.

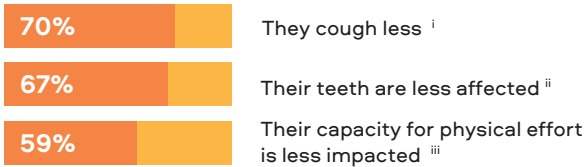
2 Evidence review of e-cigarettes and heated tobacco products 2018: executive summary, <https://www.gov.uk/government/publications/e-cigarettes-and-heated-tobacco-products-evidence-review/evidence-review-of-e-cigarettes-and-heated-tobacco-products-2018-executive-summary#heated-tobacco-products>
3 Haswell, L.E., Gale, N., Brown, E. et al. Biomarkers of exposure and potential harm in exclusive users of electronic cigarettes and current, former, and never smokers. Intern Emerg Med 18, 1359–1371 (2023). HYPERLINK <https://doi.org/10.1007/s11739-023-03294-9>; Assessment of novel tobacco heating product THP1.0. Part 3: Comprehensive chemical characterisation of harmful and potentially harmful aerosol emissions (bat-science.com); Bishop E, East N, Bozhilova S, et al. An approach for the extract generation and toxicological assessment of tobacco-free 'modern' oral nicotine pouches. Food Chem Toxicol 2020; 145: 111713, <https://doi.org/10.1016/j.fct.2020.111713>

Key findings of the consumers' perception study on tobacco heating products (THPs)

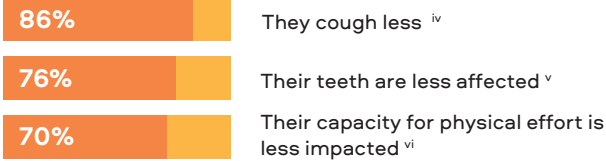
The results below reflect the perception of THP users (such as glo) in Romania about how they feel when using these products compared to smoking cigarettes and are not yet supported by scientific studies.

Main results

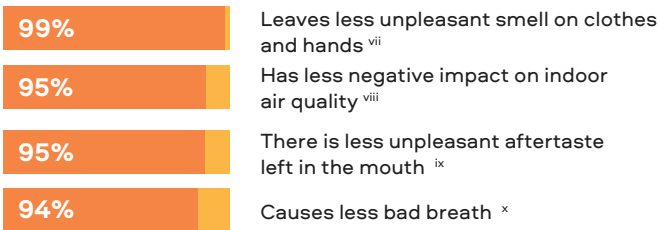
1. THP consumers, whether they still smoke sometimes or not, say that they feel that versus smoking:



2. Those users that have completely switched to THP (and no longer smoke) say that they feel the benefits compared to smoking in an even higher proportion, reporting that:



3. THP consumers that have completely switched to THP (and no longer smoke) say that they feel that these new products have social benefits compared to smoking, reporting that, compared to smoking, THP use:



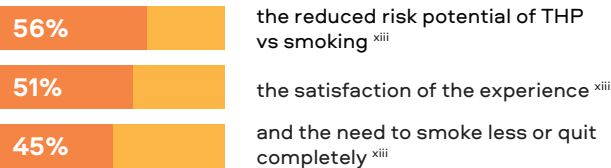
4. Almost half of respondents report that they switched completely from smoking to THP (48%), with 60% of them saying that THP products strongly influenced this decision. ^{xi}



Additional effects of stricter regulation on smoking and THP usage

If THP products won't be available on the market in the future, 63% of THP consumers whether they still smoke sometimes or not, would be disappointed and for 44% of them the first alternative they would take in consideration would be traditional cigarettes. ^{xii}

Indoor using of THP is a key driver for the adoption of reduced risk* products indicated by 85% of THP users, whether they still smoke sometimes or not. Also, 79% of the same THP users say they are using these products as they do not disturb the people around them ^{xiii}. Other key drivers for THP usage mentioned by THP users in the study are:



If the price of a pack of consumables for THP would be similar with the price for a pack of cigarettes, 45% of the THP users, whether they still smoke sometimes, would use these products less or quit them completely. ^{xiv}



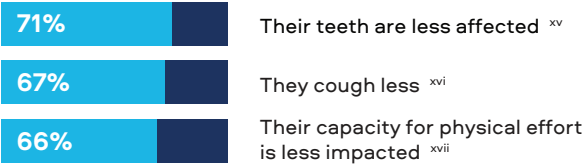
Sample group
1025 THP users (solus & dual, THP use of at least 1 year). These are all people that have used tobacco heating products (THPs) for a significant period of time, enough to be able to perceive the effects of these products versus smoking cigarettes.
Period: 1 September - 4 October 2023
Collection Method: CATI (Computer Assisted Telephone Interviewing)
Research Institute: IRES (Romanian Institute for Evaluation and Strategy)

Key findings of the consumers' perception study on vaping products (e-cigarettes)

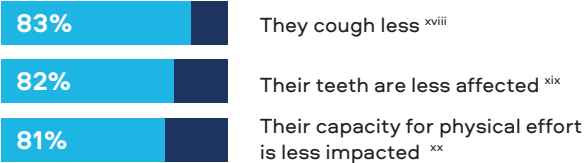
The findings below reflect what E-cigarettes users in Romania say about how they feel when using vaping products instead of smoking and are not yet supported by scientific studies.

Key findings of the consumers' perception study on vaping products

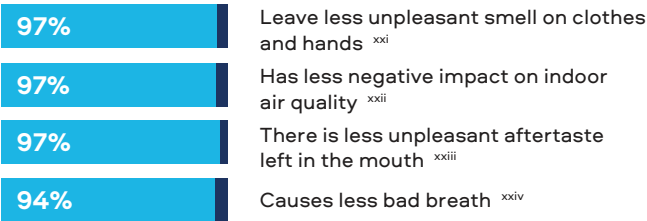
1. E-cigarettes consumers, whether they still smoke sometimes or not, say they feel that versus smoking:



2. Those users that have completely switched to vaping products (and no longer smoke) say that they feel the benefits compared to smoking in an even higher proportion, reporting that:



3. Vaping products consumers that have completely switched to vaping (and no longer smoke) also say that they feel that these new products have social benefits compared to smoking, reporting that, compared to smoking, vaping products



4. Almost 40% of respondents report that they had switched completely to vaping from smoking. ^{xxv}



Sample group

600 vaping users (solus & dual, vaping products use of at least 1 year). These are all people that have used vaping products for a significant period of time, enough to be able to perceive the effects of these products versus smoking cigarettes.

Period: 1 September – 4 October 2023

Collection Method: CATI (Computer Assisted Telephone Interviewing)

Research Institute: IRES (Romanian Institute for Evaluation and Strategy)



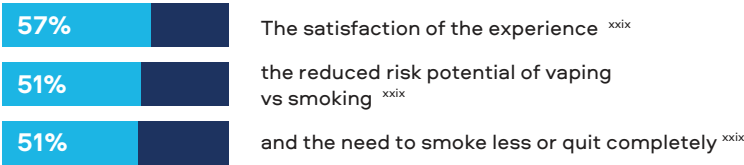
Additional effects of stricter regulation on smoking and vaping products usage

If vaping products would not be available on the market in the future, 49% of the consumers whether they still smoke sometimes or not, would be disappointed^{xxvi} and for 41% of them the first alternative they would take in consideration would be traditional cigarettes. ^{xxvii}

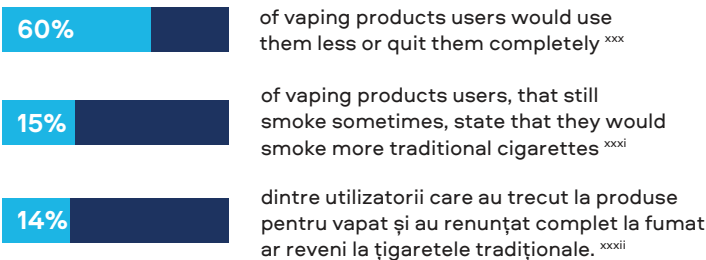
If an indoor ban of vaping products would be enforced, 59% of e-cigarettes users, whether they still smoke sometimes or not, would use these products less or quit them completely. ^{xxviii}

Indoor using is a key driver for vaping indicated by 80% of respondents, whether they also smoke sometimes or not. Also, 77% believe of the same vaping users say they are using these products as they do not disturb the people around them ^{xxix}.

Other key drivers for vaping mentioned by vaping users, whether they also smoke sometimes or not, are:



If flavoured vaping products options would disappear from the market,



Conclusions

It is vital that manufacturers invest in high quality R&D to ensure products are not just made to excellent standards but that they satisfy consumers' requirements for nicotine without many of the harmful components that result from the burning of tobacco. While nicotine is addictive, it is not the primary cause of smoking-related diseases.



National Health Service,
UK:

“Although nicotine is addictive, it is relatively harmless to health. It is the many other toxic chemicals contained in tobacco smoke that cause almost all the harm from smoking.”

Romanian consumers of tobacco heating products or vaping products state they perceive significant physical and lifestyle improvements versus smoking.

Key learnings

1

The outcomes of this consumers' perceptions study show that consumers are willing to seek out alternatives to smoking. Every smoker is an individual who has different preferences, therefore a one-size-fits all approach doesn't work. At BAT, we have a multi-category approach providing adult consumers with a wide range of enjoyable and less risky products*.

2

BAT believes that regulation should be based on the best available data, which recognises the difference between traditional cigarettes and smokeless, reduced-risk* products, like THPs or vaping products. We believe in a multi-category approach to Tobacco Harm Reduction so that adult consumers can choose the most appropriate reduced risk product* for them.

3

We believe that each reduced risk* product category should have its own regulatory definition and that science should guide the development of evidence-based and risk proportionate regulation for each category. We urge policy makers, public health bodies and regulators to make informed decisions, based on the best available scientific evidence. We also take note of the progress that has been made in countries that have successfully implemented Tobacco Harm Reduction strategies, and we believe that consumers should always have access to reliable sources of information about alternative products.



*Based on the weight of evidence and assuming a complete switch from cigarette smoking. These products are not risk free and are addictive.

** Public Health England was reorganized as the Office for Health Improvement & Disparities in October 2021

(<https://www.gov.uk/government/publications/location-of-public-health-england-phe-functions-from-1-october-2021/public-health-system-reform>
[s-location-of-public-health-england-functions-from-1-october](https://www.gov.uk/government/publications/location-of-public-health-england-phe-functions-from-1-october-2021/public-health-system-reform))

⁴Vaping myths and the facts, <https://www.nhs.uk/better-health/quit-smoking/vaping-to-quit-smoking/vaping-myths-and-the-facts/>

- ⁱ Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP makes you cough less/same/more compared to cigarettes?
- ⁱⁱ Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP has less/same/more negative impact on your teeth
- ⁱⁱⁱ Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP has less/same/more negative impact on your capacity for physical effort compared to cigarettes?
- ^{iv} Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP makes you cough less/same/more compared to cigarettes?
- ^v Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP has less/same/more negative impact on your teeth
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- ^{vii} Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP causes less/same/more unpleasant smell on clothes and hands (two questions)
- ^{viii} Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP has less/same/more negative impact on indoor air quality
- ^{ix} Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP causes less/same/more unpleasant aftertaste
- ^x Question: Thinking about the usage of THP, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP causes less/same/more bad breath
- ^{xi} Question: I understand you smoked in the past, but quit in the meantime. Considering the period after turning 19, how long you smoked before you quit?
- ^{xii} Question: What would be the first alternative considered, if the THP device you use most often disappears from the market?
- ^{xiii} Question: Which of the following contributed to the decision to use products that heat the tobacco but do not burn it?
- ^{xiv} Question: If the consumables for THP would cost as much as a pack of cigarettes (over 20 lei/pack), how would this influence your consumption?
- ^{xv} Question: Thinking about the usage of e-cigarettes, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using THP has less/same/more negative impact on your teeth
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- ^{xxiv} Question: Thinking about the usage of e-cigarettes, compared to cigarettes, what have you noticed regarding the following aspects: Would you say that using e-cigarettes causes less/same/more bad breath
- ^{xxv} Question: I understand you smoked in the past, but quit in the meantime. Considering the period after turning 19, how long you smoked before you quit?
- ^{xxvi} Question: How would you feel if e-cigarettes disappeared from the market and you could no longer use them?
- ^{xxvii} Question: What would be the first alternative considered, if the e-cigarette you use most often disappears from the market?
- ^{xxviii} Question: If e-cigarettes were no longer allowed indoors, how would that affect your consumption?
- ^{xxix} Question: Which of the following contributed to the decision to use e-cigarettes?
- ^{xxx} Question: If e-cigarettes were no longer available with menthol or flavors, how would this affect your consumption?
- ^{xxxi} Question: You said you would stop using them, or continue to use them to a lesser extent, if e-cigarettes no longer had menthol or flavored options available. Would this affect your consumption of factory (packaging) cigarettes?
- ^{xxxii} Question: You said you would stop using them, or continue to use them to a lesser extent, if e-cigarettes no longer had menthol or flavored options available. If so, would you go back to smoking traditional cigarettes?