

From Science – to Politics

Harm Reduction – a Narrative of the Tobacco Industry

Background

Tobacco and e-cigarette industry are increasingly presenting the concept of harm reduction to policymakers and the public as the central solution to reducing the harmful health effects of smoking. Following their concept, smokers should switch from cigarettes to new products that are claimed as potentially less harmful. In reality, the manufacturers are interested in securing their sales and profits.

The aim of harm reduction is not to stop drug use but to reduce its harmful effects on health. The concept of harm reduction is based on the fact that, while complete abstinence is seen as the ideal goal, it is also recognised that not all users will be able to achieve complete cessation. Harm reduction is a pragmatic, accepting approach that aims to use a variety of tools to move drug users towards reduced harm, implemented within a broader public health framework.¹² In the case of tobacco use, switching to a less harmful product is intended to reduce the harmful effects of smoking for smokers who are unable or unwilling to stop smoking.⁸ In the context of smoking, harm reduction is a complementary measure to tobacco prevention and cessation, aiming to minimize the harm caused by smoking among smokers and to reduce smoking-related morbidity and mortality in the general population, without necessarily requiring complete cessation of tobacco and nicotine use.^{8,14,25,26}

The role of the tobacco industry in harm reduction

Although the companies prioritize harm reduction, they are guided by commercial interests and driven by an environment in which smoking is losing social acceptability and regulatory

measures are making it more difficult to sell tobacco products to smokers. The primary goal of the industry is to increase overall sales.^{6,23} The tobacco industry clearly states – without specifying a time frame – that the revenues from traditional cigarettes are an essential part of their business model.^{2,20}

Jan Mücke of the German Association of the Tobacco Industry and Novel Products (Bundesverband der Tabakwirtschaft und neuartiger Erzeugnisse, BVTE), an association of major tobacco companies, e-cigarette manufacturers and related industries, comments on harm reduction as follows: “This principle of tobacco harm reduction should lead our industry into the future and secure the business models **in the traditional tobacco sector** as well as in the new business areas.” (Editor’s emphasis)¹³

The tobacco industry’s primary goal is not to reduce harmful health effects, but to maintain its profits.¹⁷ Ideally, manufacturers need long-term users for their profits; therefore, they advocate the concept of harm reduction which includes the maintenance of addiction.

The tobacco industry also uses the harm reduction debate to position itself as a responsible political partner and to present itself as the solution to the harm caused by smoking – the industry itself causes the problem.²⁷ It tries to use this issue to influence political decisions – exactly what the WHO Framework Convention on Tobacco Control was designed to prevent.

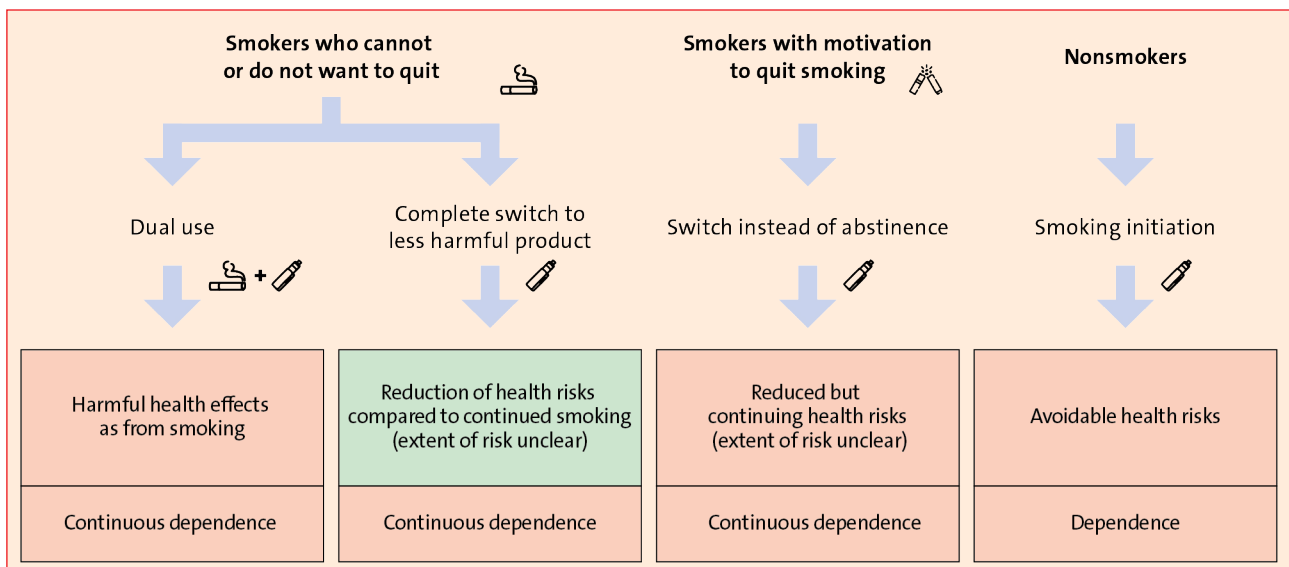


Figure 1: Opportunities and risks of harm reduction for the individual. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2023

Foundation for a Smoke-Free World (FSFW)

The FSFW was established in 2017 to promote harm reduction. It describes itself as independent, but is 100 per cent funded by Philip Morris International (PMI). Through research and outreach, the FSFW supports Philip Morris' strategy to establish harm reduction as a key solution to smoking-related harm effects in the scientific, public and political arenas. In doing so, the FSFW ultimately promotes and advertises the manufacturer's alternative products.²³

The most effective way to protect your health is to stop smoking and the use of all tobacco and nicotine products.

- How many non-smokers will start consuming less harmful products. Non-smokers expose themselves to avoidable health risks.
- Regulation of the products. To achieve a social benefit, they should be more attractive to smokers than smoking tobacco products, but offer no incentive to non-smokers.
- The marketing strategies of the manufacturers. Non-smokers, especially adolescents and young people, should not be recruited as new customers through marketing.
- The extent of manufacturers' influence on regulatory processes. A weakening of regulatory measures, which encourages (young) new users in particular, increases the negative effects of the use of less harmful products.

Does harm reduction have social benefits?

The best health protection for the individual is to completely abstain from tobacco and nicotine. If this is not possible, switching completely to a less harmful product may reduce the harmful health effects, but if smoking continues at the same time ("dual use"), no significant health benefit can be expected, as each cigarette is harmful.¹ (Fig. 1)

For society as a whole, a potential benefit of less harmful products depends on several factors^{14,26} (Fig. 2):

- Whether the product is actually significantly less harmful than smoking. Only if the product is indeed significantly less harmful, a substantial health benefit is to be expected.
- Whether many smokers actually switch completely to the less harmful product. For dual use and low switching rates no significant health benefit is to be expected.

Problematic aspects of harm reduction

Attracting non-smokers as new users

Manufacturers are constantly developing new products: E-cigarettes, heat-not-burn tobacco products, smokeless tobacco products, tobacco-free nicotine products. They rely on a wide range of products to meet a variety of consumer needs.^{2,20} These products are attractive not only to smokers, but also to non-smokers and especially to young people. In addition, manufacturers advertise their products in ways that make them attractive to adolescents and young people.^{6,23} For non-smokers, these products represent an avoidable risk, and non-smoking adolescents and young people in particular should not start using them. There is also concern that new users may later switch to harmful smoking tobacco products.²²

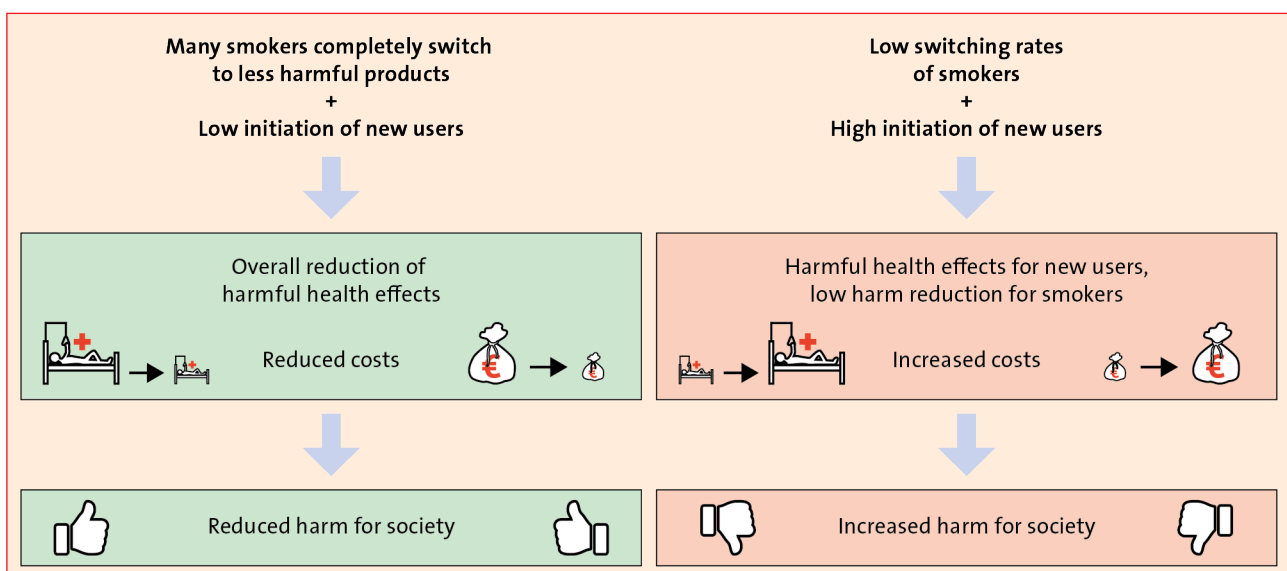


Figure 2: Opportunities and risks of harm reduction for society. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2023

Imprint

© 2023 German Cancer Research Center (DKFZ), Heidelberg

Authors: Dr. Katrin Schaller, Dipl.-Biol. Andy Hartard

Layout, illustration, typesetting: Dipl.-Biol. Sarah Kahnert

Suggested citation: German Cancer Research Center (2023) Harm Reduction – a Narrative of the Tobacco Industry. From Science – to Politics, Heidelberg

Responsible for the content:

Dr. Katrin Schaller

German Cancer Research Center (DKFZ)

Cancer Prevention Unit and

WHO Collaborating Centre for Tobacco Control

Im Neuenheimer Feld 280

D-69120 Heidelberg

Phone: +49 (0)6221 42 30 07 | E-Mail: who-cc@dkfz.de

Translated from German with the assistance of DeepL.

This publication is available online at:

https://www.dkfz.de/en/krebspraevention/Downloads/1_Books-Reports-Brochures-Factsheets.html.

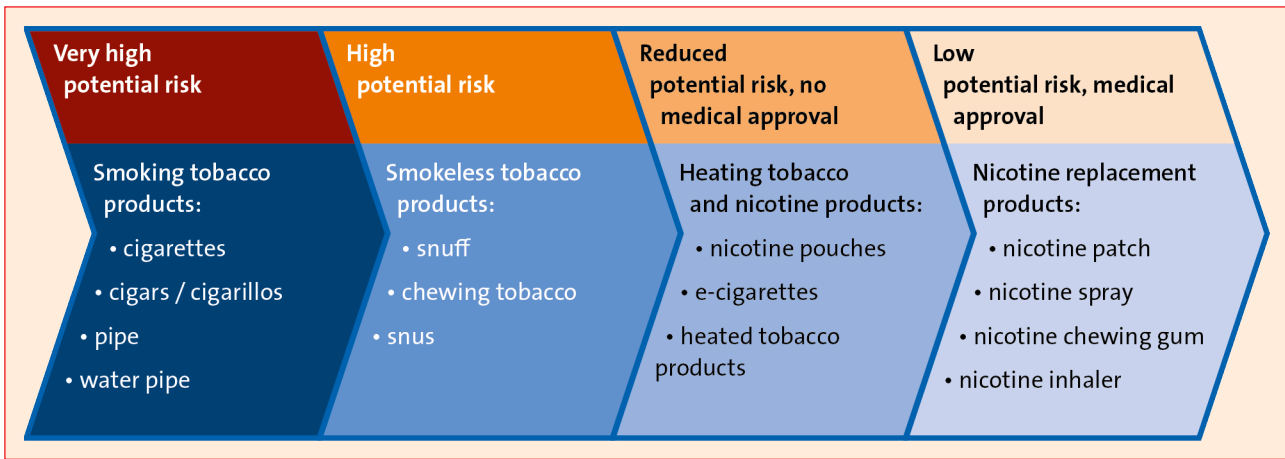


Figure 3: Harmful potential of various tobacco and nicotine products. Source: Deutsches Krebsforschungszentrum 2020⁴. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2023

The products currently marketed by tobacco and e-cigarette manufacturers expose users to a lower amount of toxic substances, but they are by no means harmless (Fig. 3)

Smokeless tobacco products contain tobacco-specific nitrosamines and other carcinogens. Studies from the USA and Scandinavian countries show an increased risk of oesophageal cancer with the use of chewing or smokeless tobacco.²⁹ The use of heated tobacco products reduces exposure to the main harmful constituents in tobacco smoke compared with smoking, but increases exposure to other harmful constituents. It is unclear whether the reduced exposure to harmful constituents leads to reduced health risks.⁴

The use of e-cigarettes exposes the body to harmful substances, although to a lower extent than smoking. Animal and cell studies, as well as an increasing number of case studies, suggest that there may be a health risk associated with the use of e-cigarettes. However, the long-term health effects of use are currently unclear.⁴

Nicotine pouches deliver nicotine as quickly and effectively as smokeless tobacco products,¹¹ so they are likely to be as addictive as smokeless tobacco. Nicotine is not the main cause of smoking-related diseases, but it does affect some body functions and may increase the risk of several diseases such as insulin resistance and atherosclerosis. Nicotine may affect fetal development when used during pregnancy.⁴

Nicotine dependence persists when switching to products with potential lower risk

Heated tobacco products and modern e-cigarettes deliver nicotine as effectively as tobacco cigarettes and are therefore likely have a similar addiction potential.^{21,28} Users are no longer free to choose whether they want to use the product or not. Although the products may contain less harmful constituents and the amount of harmful constituents absorbed may be less than with smoking, there is still a risk of harm.⁴ Addiction can interfere with social life and, especially for persons with lower

Case study: Philip Morris International – profit maximization over harm reduction

Contrary to its harm reduction rhetoric about making the world “smoke-free”, Philip Morris is promoting its cigarette market worldwide and trying in many ways to prevent or at least delay tobacco control policies:²³

- PMI has launched Iqos mainly in rich countries with strong tobacco control policies and in countries where cigarette smoking is declining. Iqos is sold at prices similar to premium cigarettes. The manufacturer’s profit margin on heated tobacco products is currently much higher than on cigarettes in the same price range.^{18,19} In these countries, PMI finds it difficult to further expand its cigarette market and smokers are more willing and financially able to switch to an expensive alternative product. This allows the manufacturer to protect its profits. If PMI was truly interested in harm reduction, the alternative product would have to be cheaper than cigarettes to attract more smokers, and it would also have to be launched in markets where cigarette sales are increasing.
- To promote Iqos, PMI sometimes used young influencers on social media – against the company’s own policy – and also worked with very young brand ambassadors at events such as festivals, which are largely attended by young people. This makes the products attractive to young people and can attract them as new customers.
- Globally, PMI continues to launch new cigarettes, with more than 60 new product launches in the cigarette market each year from 2018 to 2020.¹⁵ This is contrary to the harm reduction concept.
- Globally, PMI continues to advertise cigarettes to keep smokers smoking and to attract new users.
- Globally, PMI uses intensive lobbying and litigation to prevent or at least delay strong tobacco control policies. In the EU, for example, PMI tried to delay the track-and-trace system required by the European Tobacco Products Directive to reduce cigarette smuggling. It also tried to influence the revision of the European Tobacco Tax Directive to introduce a new tax category for potentially less harmful products.²⁴

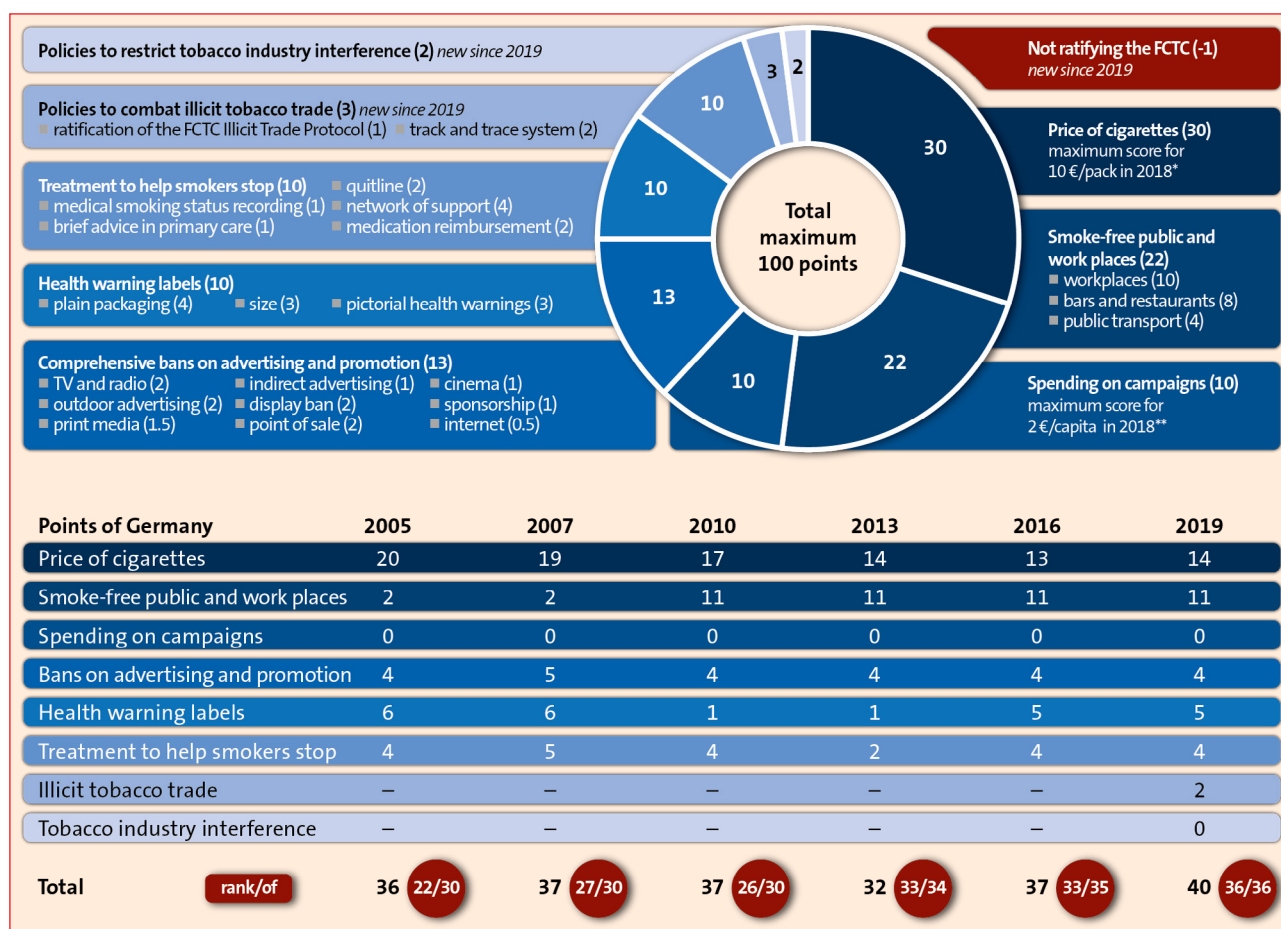


Figure 4: Maximum achievable score on the Tobacco Control Scale (TCS) in 2019 and Points and rank of Germany in the TCS ranking in 2005, 2007, 2010, 2013, 2016 and 2019. *Weighted average price taking into account EU Purchasing Power Standards (PPS), **Based on the average EU gross domestic product per capita expressed in PPS. Source: Deutsches Krebsforschungszentrum 2020⁴. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2020

socioeconomic background, it is an unnecessary financial burden. Manufacturers in particular benefit from the addiction of consumers, who continue to use the products.

Harm reduction is only relevant for some smokers; a significant proportion of smokers could be motivated to quit completely by better cessation services.

The majority of smokers (61.5 per cent) have already tried to quit smoking and more than half of smokers (57.9 per cent) plan to quit.¹⁶ These smokers can be supported in their decision to quit by an environment that motivates them not to smoke. Improved access to and provision of cessation services and strong tobacco control policies would help them to quit. Harm reduction can only be considered for those smokers who continue to smoke despite a supportive environment or pre-existing diseases and who do not achieve complete cessation with evidence-based support.^{1,4,10}

Smoking cessation by cigarette manufacturers?

In 2020, Philip Morris offered a smoking cessation programme to a hospital in Germany. A key part of the “novel approach” was to inform smoking employees who cannot or do not want to quit about lower-risk alternatives to cigarettes. In this way, the programme ultimately promotes sales of Philip Morris’ alternative products (mainly heated tobacco products) and thus helps to increase profits.⁷

The best health protection is tobacco control

Compared with other European countries, Germany ranks last in the implementation of tobacco control policies and has been steadily declining since 2007. All proven effective measures to reduce tobacco use, including smoking cessation interventions, are far from being well implemented in Germany (Fig. 4).^{4,9} A mandatory tobacco control strategy with concrete measures and a binding timetable for their implementation, as proposed by more than 50 health organizations, can help to significantly reduce smoking rates.⁵

Conclusion

The most effective protection against the health effects of smoking is to quit completely. As related products such as e-cigarettes and heated tobacco products are also potentially harmful, their use should also be stopped for health reasons. An environment that promotes non-smoking and supports cessation helps to reduce the proportion of smokers in the population.

The concept of harm reduction is only relevant for the limited proportion of smokers who cannot or do not want to quit using evidence-based methods. The tobacco and e-cigarette industry is demanding that policymakers promote harm reduction in order to protect and increase their own profits. It is not in the manufacturers’ interest that only smokers switch to less harmful alternative products, without attracting new users – which could mean harm reduction for

society – because the manufacturers would lose consumers in the long run.

Recommendations

The following measures will make a significant contribution to reducing tobacco use and the health and social consequences of smoking:

- Consistent implementation of the policies contained in the WHO Framework Convention on Tobacco Control³.
- The commitment of the Federal Government to develop and implement a mandatory strategy for a tobacco-free

Germany by 2040, as proposed by more than 50 health organisations⁵.

- E-cigarettes, heated tobacco products as well as new tobacco and nicotine products should be regulated in the same way as smoking tobacco for preventive health protection, including to make them unattractive to young people.
- Political decisions must be effectively protected from influence by manufacturers of tobacco and related products and their organisations; there should be no dialogue with manufacturers, even in the name of harm reduction.

References

- 1 Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) (2020) S3-Leitlinie „Rauchen und Tabakabhängigkeit: Screening, Diagnostik und Behandlung“. AWMF-Register Nr. 076-006 (Gültig bis 31.12.2025)
- 2 British American Tobacco (2021) Building the enterprise of the future. Annual Report 2020
- 3 Deutsches Krebsforschungszentrum (2011) Perspektiven für Deutschland: Das Rahmenübereinkommen der WHO zur Eindämmung des Tabakgebrauchs. WHO Framework Convention on Tobacco Control (FCTC). Heidelberg
- 4 Deutsches Krebsforschungszentrum (2020) Tabakatlas Deutschland 2020. Pabst Science Publishers, Lengerich
- 5 German Cancer Research Center, German Cancer Aid & German Smokefree Alliance (2021) Strategy for a tobacco-free Germany 2040. Heidelberg, https://www.dkfz.de/de/krebspraevention/Downloads/pdf/Buecher_und_Berichte/2021_Strategy-for-a-tobacco-free-Germany-2040.pdf
- 6 Dewhirst T (2021) Co-optation of harm reduction by Big Tobacco. *Tob Control* 30: e1–e3
- 7 Grünert T (2021) Rauchentwöhnung: So möchte der Bock zum Gärtner werden.... gesundheitspolitik.de, 19.8.2021
- 8 Hatsukami DK & Carroll DM (2020) Tobacco harm reduction: Past history, current controversies and a proposed approach for the future. *Prev Med* 140, DOI: doi.org/10.1016/j.ypmed.2020.106099
- 9 Joossens L, Feliu A & Fernandez E (2020) The Tobacco Control Scale 2019 in Europe
- 10 Kotz D, Batra A & Kastaun S (2020) Smoking cessation attempts and common strategies employed. *Dtsch Arztebl Int* 117: 7–13
- 11 Lunell E, Fagerström K, Hughes J & Pendrill R (2020) Pharmacokinetic comparison of a novel non-tobacco-based nicotine pouch (ZYN) with conventional, tobacco-based Swedish snus and American moist snuff. *Nicotine Tob Res* 22: 1757–1763
- 12 Marlatt GA & Witkiewitz K (2010) Update on harm-reduction policy and intervention research. *Annu Rev Clin Psychol* 6: 591–606
- 13 Mücke J (2021) Nachhaltigkeit im Fokus. BVTE will eigenes Umweltkonzept vorlegen / Optimismus trotz Lockdown. *Die Tabak Zeitung* 3: 1
- 14 National Academies of Sciences, Engineering and Medicine (2018) Public health consequences of e-cigarettes. The National Academics Press, Washington, D.C.
- 15 Olczak J (2021) Delivering a smoke-free future. The next growth phase. Investor Day 2021, February 10, 2021
- 16 Papadakis S, Katsaounou P, Kyriakos CN, Balmford J, Tzavara C, Girvalaki C, Driezen P, Filippidis FT, Herbec A, Hummel K, McNeill A, Mons U, Fernández E, Fu M, Trofor AC, Demjén T, Zatoński WA, Willemsen M, Fong GT, Vardavas CI & EUREST-PLUS consortium (2020) Quitting behaviours and cessation methods used in eight European Countries in 2018: findings from the EUREST-PLUS ITC Europe Surveys. *Eur J Public Health* 30: iii26–iii33
- 17 Peeters S & Gilmore AB (2015) Understanding the emergence of the tobacco industry's use of the term tobacco harm reduction in order to inform public health policy. *Tob Control* 24: 182–189
- 18 Philip Morris International (2021) Investor information. April 2021
- 19 Philip Morris International (2021) Investor information. July 2021

- 20 Philip Morris International (2021) Together. Forward. Philip Morris International Annual Report 2020
- 21 Phillips-Waller A, Przulj D, Pesola F, Myers Smith K & Hajek P (2021) Nicotine delivery and user ratings of IQOS heated tobacco system compared to cigarettes, Juul and refillable e-cigarettes. *Nicotine Tob Res*, DOI: 10.1093/ntr/ntab094
- 22 Staff J, Kelly BC, Maggs JL & Vuolo M (2021) Adolescent electronic cigarette use and tobacco smoking in the Millennium Cohort Study. *Addiction*, DOI: 10.1111/add.15645
- 23 Stopping Tobacco Organizations and Products (2021) Addiction at any cost. Philip Morris International uncovered. Vital Strategies, <https://exposetobacco.org>
- 24 Stopping Tobacco Organizations and Products, Corporate Europe Observatory & European Public Health Alliance (2021) Targeting the European Commission: the 7 lobbying techniques of Big Tobacco
- 25 Stratton K, Shetty P, Wallace R & Bondurant S (2001) Clearing the smoke. Assessing the science base for tobacco harm reduction. Institute of Medicine, National Academy Press, Washington, DC
- 26 Tobacco Tactics (2021) Harm reduction. University of Bath, <https://tobaccotactics.org/wiki/harm-reduction> (aufgerufen am 19.8.2021)
- 27 Vital Strategies (2019) Crooked Nine: nine ways the tobacco industry undermines health policy. Vital Strategies, New York, NY
- 28 Voos N, Goniewicz ML & Eissenberg T (2019) What is the nicotine delivery profile of electronic cigarettes? *Expert Opin Drug Deliv* 16: 1193–1203
- 29 Warnakulasuriya S & Straif K (2018) Carcinogenicity of smokeless tobacco: evidence from studies in humans & experimental animals. *Indian J Med Res* 148: 681–686