



Revolution
0.0%
on the beer market



The 0.0% revolution on the beer market

LIST OF CONTENTS

Introduction: The 0.0% beer revolution setting trends for many years	5
1. NON-ALCOHOLIC BEERS – CHARACTERISTICS	6
1.1 What is non-alcoholic beer?	6
1.2 Revolution in non-alcoholic beer	6
1.3 How is non-alcoholic beer brewed?	8
1.4. What does non-alcoholic beer contain?	10
1.5 Facts and myths	12
2. THE NON-ALCOHOLIC BEER MARKET IN POLAND AND EUROPE	13
2.1 The characteristics and the size of the Polish non-alcoholic beer market	13
2.2 Spain and Germany	14
2.3 0.0% beer as a response to the key trend: <i>better for you</i>	16
3. POLISH 0.0% BEER CONSUMERS	18
3.1 Who drinks non-alcoholic beer?	18
3.2 Non-alcoholic beer – a reason-based choice and a choice for pleasure	22
3.3 0.0% beer for conscious, adult consumers	25
4. THE IMAGE OF NON-ALCOHOLIC BEER	26
5. THE FUTURE OF THE BEER MARKET	28
References – footnotes	31



The 0.0% revolution

setting trends for many years

Non-alcoholic beer was once seen in Poland as “nudge, nudge, wink, wink beer”. In the late 1990s, most Poles were aware of “non-alcoholic (wink) beer,” but were not keen to drink it. Consumers complained about the poor taste of the then non-alcoholic beers that vaguely resembled the real thing. 30 years after Paweł Wilczak was winking at the television audience, arguing that guests of his club are having great fun over non-alcoholic beer, Poles came to a conclusion that zero-alcohol beer is a great choice for social gatherings, parties and leisure.

2018 saw the first surge by more than 80% in the value and volume of the non-alcoholic beer segment in Poland. It was driven by the development of zero-alcohol brewing technology that helped retain the flavour and the aroma of traditional beer as this is not alcohol content, but flavour and refreshment that consumers seek for in beer.

For five years, the zero-alcohol beer category in Poland has been demonstrating double-digit growth year-to-year. Meanwhile, alcoholic lagers, and especially the strong beer segment are witnessing a decline. These two parallel trends distinctive for modern societies that embrace a healthy lifestyle are contributing to a decrease in the average alcohol content in beer and the share of beer in alcohol consumption in Poland. Today, large, regional and craft breweries are all making non-alcoholic beer.

In the late 2021, sales of non-alcoholic beers exceeded PLN 1.17 billion, what corresponded to 6.5% of the beer market and marked a fourfold increase in five years. **Poland accounts for 12% of the EU non-alcoholic beer market. Teamed up with Germany, Spain and the Netherlands, it is one of four countries whose combined output corresponds to 74% of non-alcoholic beer volume in the European Union.**

The 0.0% beer revolution is not limited to Poland. It reflects global trends in evolving consumer behaviours related to the choice of food products. More and more consumers are opting for healthier products that better fit their lifestyle. A very special role is played by Gen Z whose older members have become independent and are now making purchasing decisions. Unlike other generations before them, members of Gen Z are determined to reduce consumption of products they believe are harmful to their health or the planet, what includes reduction of alcohol they consume¹.

Zero-alcohol beer responds to the needs of modern, demanding consumers - it offers refreshment and flavour without alcohol they do not wish or cannot drink. This way non-alcoholic beer is actually making a contribution to reduction of the amount of alcohol consumed. It has become one of the key development guidelines for the modern brewing sector.

1

Non-alcoholic beer - characteristics

1.1 What is non-alcoholic beer?

Definition in the Polish legislation

The Polish law provides a clear definition of the alcoholic beverage. In line with provisions of Article 46 paragraph 1 of the Law on Upbringing in Sobriety: *an alcoholic beverage is a product intended for consumption, containing agricultural ethyl alcohol in concentration exceeding 0.5% alcohol by volume.*

Which is why **non-alcoholic beer is beer whose alcohol content does not exceed 0.5% of total volume. This includes both beers with minimal alcohol content (0.01% - 0.5%) as well as those that are completely alcohol-free (0.0%).**

The flavour and the aroma of non-alcoholic beer resemble that of traditional beer, but it comes with minimum alcohol content or contains no alcohol at all. Brewers use different names for non-alcoholic beers, such as: "zero", "free", "light," "low-alcohol" or "non-alcoholic". Seeking for golden brew with zero alcohol content, we should be looking for the 0.0% marking on the label.

1.2 Revolution in non-alcoholic beers

Transformation of the 0.5% to 0.0% ABV category

The non-alcoholic beer category practically did not exist in Poland until 2016. Various breweries did have in their range rare products that were usually not alcohol-free, but contained up to 0.5% alcohol. One of the oldest beers in this category is the popular Karmi brand which was first brewed in Okocim Brewery in 1993.

First non-alcoholic craft beers were launched in 2016, but zero alcohol beers truly gained momentum in 2017 when their sales value fetched PLN 287 million, what gave them nearly 2% of share in the beer market (by value)². The segment was still dominated by beers with up to 0.5% alcohol content (77%), while alcohol-free beer accounted for merely 23%³.

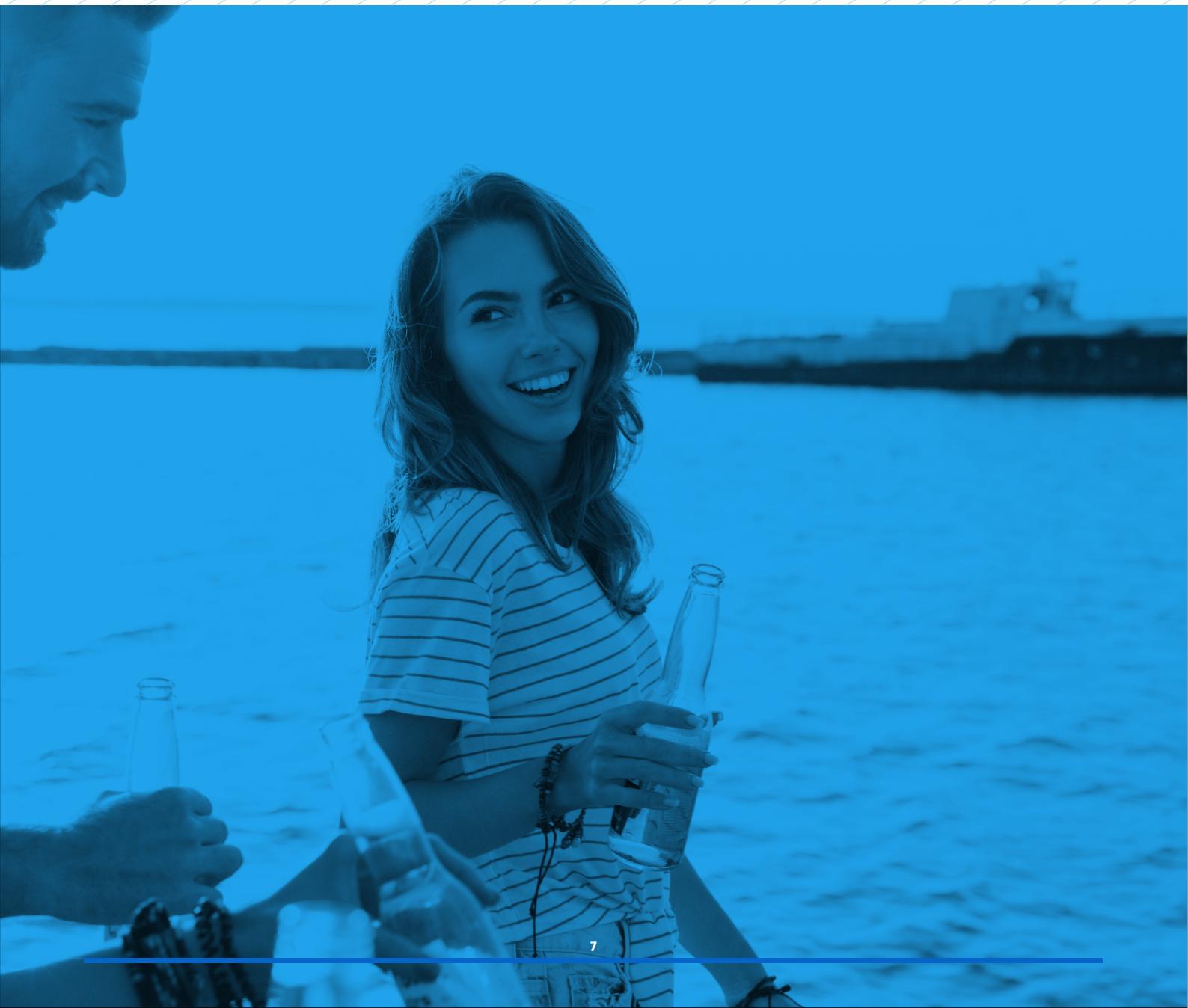
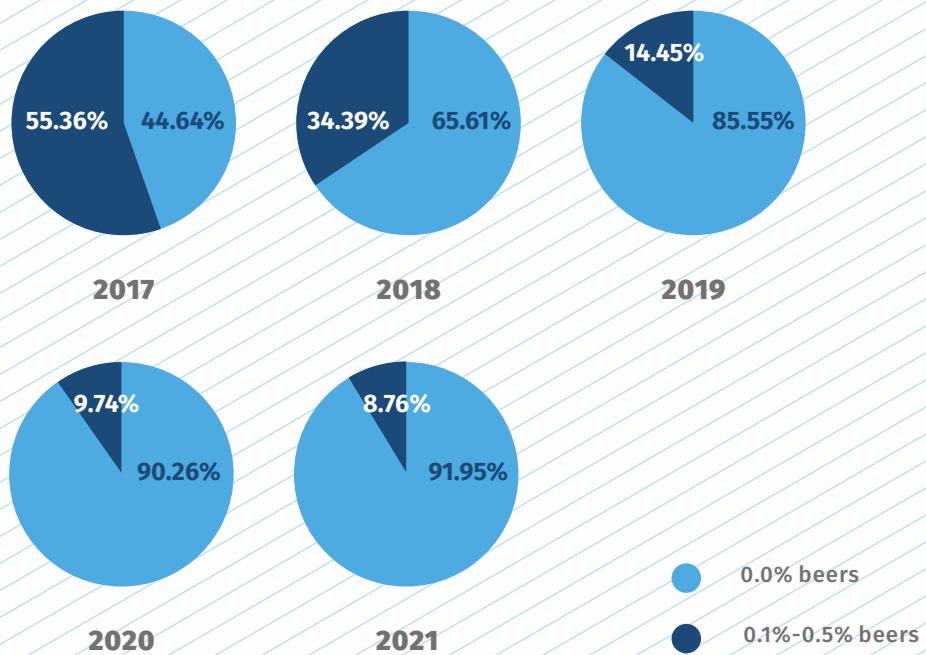
The true 0.0% beer revolution began a year later. In 2018, the category went up by 85% in terms of volume, while its value nearly doubled. 30 new non-alcoholic beers were launched on the market, while alcohol-free beer accounted for more than 46% of the segment⁴.

Various beer styles in non-alcoholic versions were launched for the very first time. The segment was previously dominated by lagers and radlers, but in 2018 the range of breweries was expanded with non-alcoholic IPAs, India Pale Ale, American Pale Ale, Sour Ale, Witbier and others.

Currently, more than 90% of the non-alcoholic beer category accounts for 0.0% beer, while the size of the segment has grown more than 3.5 times to reach a value four-fold versus 2017 (PLN 1.17 billion in 2021).

Development of the non-alcoholic beer segment in the past five years was mainly driven by zero alcohol beer. In 2017, zero-alcohol beers accounted for less than 50% of the category's volume, while their share corresponded to more than 90% of the segment in the past two years.

A change in the structure of the non-alcoholic beer segment (by volume) 2017 - 2021



1.3 How is non-alcoholic beer brewed? Brewing methods and technological progress

Non-alcoholic beer is made from the same ingredients like alcoholic beer - malt, hops, yeast, and water. Its brewing process is almost identical to that used to make alcoholic beer. Only one stage is different, depending on the applied technology. All non-alcoholic beer production methods strive either to prevent creation of alcohol in beer or remove it from the brew. There are three most popular methods for making non-alcoholic beer - the first two are biological, while the third one is a physical method that may be used in two ways.



1

Malting

Grain used to make beer - usually barley or wheat - must first be malted. Grain germination is halted by drying, and the resulting malt is sieved and milled. Milled malt goes into the mash. Subjected to high temperatures, it produces sugars essential for fermentation, or the so-called extract.



2

Filtration

Later, the finished malt mash is filtered, and the process results in what is known as wort.



3

Brewing

Wort now goes into boilers where it is boiled for at least several dozen minutes with an addition of hops. At this stage, hops lend the future brew its distinctive bitter taste. After brewing, beer is cooled down and yeasts are added.

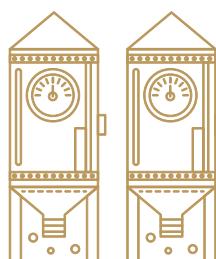


4

Fermentation

Over the next several days, yeasts trigger fermentation and "saturate" beer with alcohol. This is when the distinctive flavour and beer aroma are created.

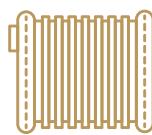
NON-ALCOHOLIC BEER
interrupted
fermentation
or
arrested
fermentation



5

Ageing

The finished beer needs to be put aside for a while: it is ageing in a special tank at near-zero temperature for about a week to develop flavour.



6

Filtration

We are nearly done - in order for the beer to be clear, it still needs to be well filtered and cleaned of yeast.



7

Packaging

Filtered beer may be poured into bottles, cans, kegs and released to the world at large where throngs of loyal admirers await it.



8

It takes vast brewing knowledge and expertise to make good non-alcoholic beer.

Regardless of the selected "dealcoholisation" method, the knowledge of the art of brewing is essential to retain the distinctive beer aroma and flavour throughout production of non-alcoholic beer.

NON-ALCOHOLIC BEER
dealcoholisation

Most popular methods of making non-alcoholic beer include:

- 1. Interrupted fermentation** – the brewing process is identical like in case of traditional beer, but fermentation is interrupted as soon as yeasts start producing alcohol. The work of yeasts is interrupted by their removal from wort or a substantial decrease in their temperature to prevent them from converting sugar into alcohol.
- 2. Arrested fermentation** – uses strains of brewer's yeast that do not convert sugar to alcohol, but help retain the flavour and the aroma of beer.
- 3. Dealcoholisation** – when brewing comes to an end, alcohol is removed from beer using one of two methods: by evaporating alcohol in low temperature (vacuum distillation) or filtration through a special membrane (reverse osmosis).

There are two main approaches to non-alcoholic beer production: the first one implies modification of the production technology, for instance, modification of the mash profile or alteration of fermentation parameters (low concentration of wort extract, temperature profile or choosing the right yeast), while the second one involves removal of ethanol from beer made in the standard way - by evaporation or application of a membrane.

The rapid growth of the low and non-alcoholic beer market worldwide in recent years has largely contributed to intensification of R&D projects and improvement of applied methods. With the use of non-maltose-fermenting yeast, optimization of alcohol removal from beer, harnessing the potential of late hops and many other solutions, the sensory qualities of non-alcoholic beers are increasingly appreciated by consumers.



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1.4 What does non-alcoholic beer contain?

Composition and nutritional values

Non-alcoholic beers are made with different varieties of malt, hops and hop oils to create beverages with rich flavour, such as caramel, sponge cake or scented with citrus fruit or flowers. Most common additives used in non-alcoholic flavoured beers, such as radlers, are fruit juices, pulps and tea leaves.

Non-alcoholic beer has less calories than alcoholic beer, because it does not contain alcohol which is the main "source" of calories. Detailed composition, nutritional and energy values are listed on the label of each beer and on the manufacturers' websites.

Sample nutritional values of 0.0% beer

	NON-ALCOHOLIC LAGER	NON-ALCOHOLIC RADLER
beer type	lager	lemon radler
alcohol content	0.0%	0.0%
energy value in 100 ml	82 kJ / 19 kcal	106 kJ / 26 kcal
nutritional value in 100 ml	fats - 0 g including saturated fats - 0 g carbohydrates - 4.5 g including sugars - 2.2 g protein - 0.3 g salt < 0.01 g	fats - 0 g including saturated fats - 0 g carbohydrates - 6.4 g including sugars - 4.5 g protein - 0 g salt < 0 g

It should be stressed that just like regular alcoholic beer, non-alcoholic beer is a source of B vitamins, trace elements such as calcium, potassium, phosphorus, and polyphenols.

The latter ones are defined by science as some of the most potent dietary antioxidants that fight free radicals. Low calorie count, mineral and vitamin content make non-alcoholic beer an isotonic drink and an excellent option for hydration. This is a great alternative for people who are active, into sports and on a diet.





dr Patrycja Kupnicka
Pomeranian
Medical University

Non-alcoholic beer owes its isotonic properties to the presence of ions of inorganic salts, such as sodium or potassium, as well as an adequate amount of carbohydrates which lend beer the adequate osmolality¹. As a result, its consumption helps maintain the water-electrolyte balance.

Macronutrients in beer, including magnesium, potassium and phosphorus, as well as B vitamins, regulate nerve and muscle conduction, take part in energy production, and hence contribute to the maintenance of homeostasis. Just like other ingredients of beer, silicon demonstrates neuroprotective effects, while micronutrients such as manganese, which is a cofactor² of multiple enzymes, is involved in carbohydrate metabolism, antioxidant defence, and is essential for proper development and functioning of the nervous system.

Polyphenols in beer have powerful antioxidant properties as they eliminate free radicals and reduce oxidative stress to protect our cells from damage. Particularly noteworthy are ferulic acid³ and coumaric acid⁴ that demonstrate powerful neuroprotective effects. Hops-based isohumulones⁵ may have a beneficial impact on the body's lipid and carbohydrate metabolism, while given the presence of xanthohumol⁶ and myrcenol⁷ in non-alcoholic beer, its regular consumption contributes to improvement of the quality and duration of sleep, reduces stress levels and improves mental well-being. Polyphenols in beer also have a cardioprotective effect as they increase the number of circulating progenitor endothelial cells whose reduction poses the risk of developing a cardiovascular disease.

GLOSSARY

1. osmolality - the number of moles of osmotically active substances dissolved in one kilogram of solvent
2. cofactor - a non-protein component of an enzyme necessary for its catalytic activity
3. ferulic acid - a phenolic compound, a derivative of cinnamic acid
4. coumaric acid - a phenolic compound, a derivative of cinnamic acid
5. isohumulones - iso-alpha acids (IAAs) that lend beer its bitter taste
6. xanthohumol - a flavonoid chalcone that lends beer its bitter taste
7. myrcenol - a terpenoid found in hops



1.5 Facts and myths

Or what some people think about non-alcoholic beer

Myth: You can get drunk on non-alcoholic beer.

Fact: No, you can't, because non-alcoholic beer does not contain alcohol. As it is alcohol-free, zero alcohol beer is an option for people who do not want or cannot for some reason drink alcoholic beverages.

Myth: Non-alcoholic beer causes dehydration

Fact: Non-alcoholic beer supplies the body with water, trace elements and electrolytes, but has no diuresis effects (as it contains no alcohol), so it can be consumed as a rehydration drink - for example, after an exhausting run.

Myth: Non-alcoholic beer is not suitable for sporty people.

Fact: Quite contrary, with its low calorific value, minerals and vitamins it contains, non-alcoholic beer has isotonic properties and may help hydrate the body after workout.

Myth:

Non-alcoholic beer with up to 0.5% ABV is an alcoholic beverage like "regular" beer.

Fact:

The brewing sector is giving centre stage to zero alcohol beer. Which contains no alcohol! It's true that in line with the Polish legislation non-alcoholic beer is not only zero alcohol beer, but also beer whose ABV ranges from 0.1% to 0.5%, what is always a minimal amount. Similar or even higher alcohol content is demonstrated by products we eat every day, including pickles, products containing vinegar, kefir or some varieties of sourdough bread. Sweet treats such as truffles, pralines, or creams etc. contain alcohol which is added as a flavouring agent.

Product type	Alcohol content in 100 ml or 100 g
Kefir	0.5%
Pickles (cucumbers, cabbage and others)	cabbage 0.5%
Vinegar	from 0.2% to 1.5%
Rye bread	0.3%
Apple juice	0.2%
Grape juice	0.4%
Ripe bananas	0.6%
Sweets	from 0.2% to 0.5%

Myth: Non-alcoholic beer has as many calories as traditional beer.

Fact: As a rule, non-alcoholic beer has the lowest calorific value of all beers. It contains no alcohol, while each gram of alcohol has 7 kcal. 100 ml of 0.0% lager contains about 20 kcal, while its alcoholic variety contains about 40 kcal. Non-alcoholic flavoured beers have slightly more calories than 0.0% lager due to flavouring agents they contain approx. 26 kcal in 100 ml.

Myth: Non-alcoholic beer is tasteless.

Fact: A wide selection of non-alcoholic beers reflects varied styles with distinctive flavours and aromas. The choice of non-alcoholic beer is as diverse as that of alcoholic beer. Brewers have perfected methods of brewing non-alcoholic beer, and as a result non-alcoholic varieties offered on the market have retained the taste unique to beer.

2

The non-alcoholic beer market in Poland and Europe

2.1 The characteristics and the size of the Polish non-alcoholic beer market

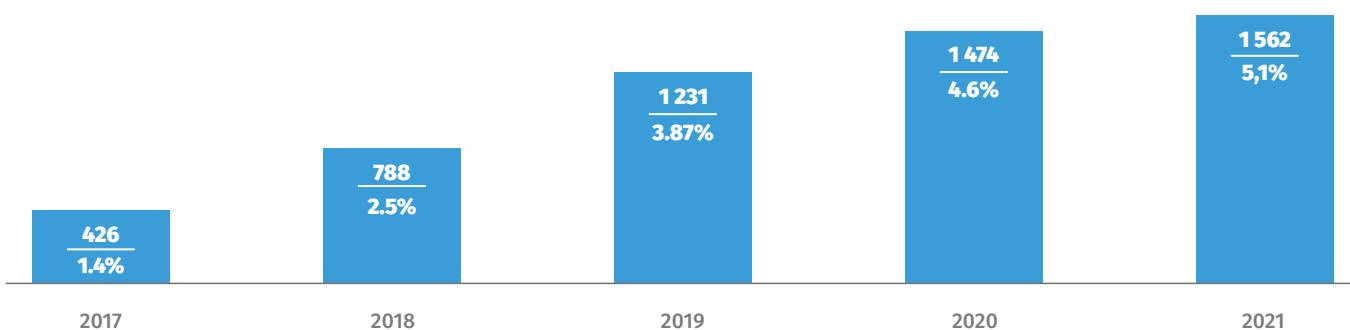
How Poland became EU's fourth largest producer in just five years

Eurostat data reveal that 1.4 billion litres of non-alcoholic beer were produced in European Union countries in 2020. Germany (30.5%), Spain (16.8%), the Netherlands (14.4%) and Poland (12%) have the largest share in the EU non-alcoholic beer market. These four countries combined brew nearly 74% of the total volume of non-alcoholic beers in the EU. Poland's high position in this league table comes as a result of growth of the non-alcoholic beer segment in the past five years. 2018 saw dynamic growth of the category both in terms of volume (up by 85%) and value (up by 80%).⁵

It was mainly driven by 0.0% beers whose share in the segment went up to more than 66%. In subsequent years, non-alcoholic beers gradually outperformed beers with up to 0.5% alcohol content to eventually reach the leading position in the segment in 2021. Today, 9 in 10 non-alcoholic beers sold are beers with zero alcohol content.

The growth in the non-alcoholic beer volume [in 1,000 hl] from 2017 until 2021 and the share of non-alcoholic beer in total beer market (by volume)

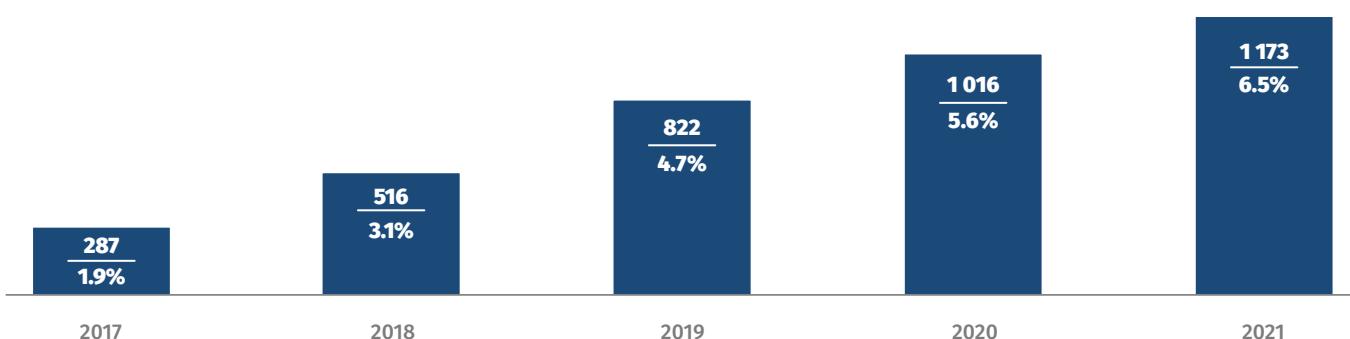
Source: NielsenIQ



In terms of value, the non-alcoholic beer segment is demonstrating double-digit growth every year and it surpassed the PLN 1 billion mark in 2020. A year later, it reached the value of PLN 1.17 billion - more than the entire breakfast cereal market or the chewing gum market. If its momentum continues, in a year's time non-alcoholic beer will become a bigger category on the food market than tea.

The rise in value of the non-alcoholic beer category [in PLN million] from 2017 until 2021 and the share of non-alcoholic beer in total beer market (by value)

Source: NielsenIQ



The non-alcoholic beer category in Poland covers three segments: lager, flavoured beer (mainly radlers/shandies), and beer specialties. Flavoured beers are a zero alcohol beer category that is most popular among consumers and drives growth of the segment.



Marcin Cyganiak
Commercial Director
Poland,
NielsenIQ

In recent years, we have been witnessing a decline in the largest beer segment of alcoholic lager. The popular “full light beer” that accounts for 80% of the beer market, is contributing to the decline of the entire beer category. Losing most ground among alcoholic lagers are strong beers whose share by volume is contracting by several percent year by year.

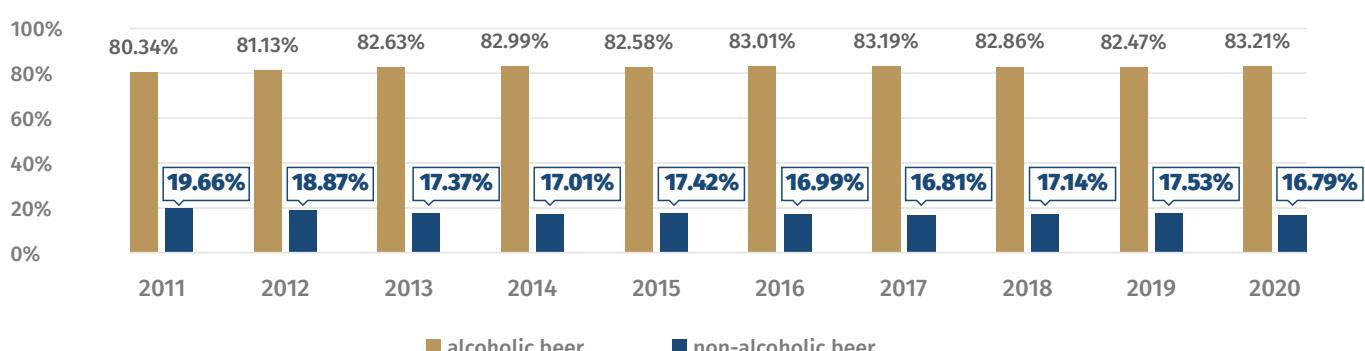
Meanwhile, positive dynamics is demonstrated by flavoured beers and premium specialties (which demonstrated an over 20% increase in 2021) as well as zero alcohol beers that have gained an unprecedented momentum. And although their sales value in 2021 was not as impressive like in previous years, it needs to be stressed that they have increased their market share by whopping PLN 157 million year-to-year. This figure may be compared to total sales value of such culinary fixtures of Polish households like mustards or crackers (approx. PLN 200 million). It should be stressed that total value of sales of non-alcoholic beers already exceeds PLN 1 billion, what makes them a separate market category in its own right with its own, dynamically burgeoning segments such as non-alcoholic lagers, specialties and zero alcohol flavoured beer that are driving - in the long-term - the value of the entire beer market.

2.2 Spain and Germany

Have been making zero alcohol beer for more than four decades

The Spanish non-alcoholic beer market has been growing for many years, and its value fetched EUR 247.92 million (PLN 1.19 billion)⁶ in 2020. Spaniards drink most non-alcoholic beer among all European nations. Pioneering zero alcohol products were launched on the local market as early as 46 years ago – these were Cruzcampo Sin and Ambar Sin beers⁷. For more than a decade, the share of the non-alcoholic beer category has remained steady at 17-19%⁸ in terms of volume. One in six beers consumed in Spain is non-alcoholic beer.

Spain: The share of non-alcoholic beer in the beer market (by volume) 2011 - 2020



Source: Statista for Ministerio de Agricultura, Pesca y Alimentación

The world leader in non-alcoholic beer production is Germany that brews more than 30% of non-alcoholic beer in the EU. First zero alcohol beers were launched on the local market more than five decades ago, but their sales were growing unhurriedly. Consumer interest in zero alcohol beer surged as late as in 2008, but this trend continues until today. Production of non-alcoholic beer stood at **6.8 million hectolitres in 2021 and now accounts for 8% of the total beer market in Germany**⁹.

Analysts predict that in not-so-distant future one in ten beers brewed in Germany will contain no alcohol. Today, German consumers have a choice of approx. 800 different non-alcoholic beer brands (10% of brands on the market). A survey conducted by the German Brewers Association (Deutscher Brauer-Bund) reveals that Germans appreciate good taste, low calorie count and natural ingredients in non-alcoholic beer. Zero alcohol beer is a popular choice for sporty people, including professional athletes who appreciate its isotonic properties, natural ingredients and low calorie count. In addition to classic zero alcohol beer styles such as Pilsner, wheat beer or shandy, brews made in Germany include a growing number of non-alcoholic regional specialties such as Kölsch and Alt as well as popular craft varieties.



Pierre-Olivier Bergeron
Secretary General,
The Brewers of Europe



The Brewers of Europe

For the past few years we have been observing dynamic growth in the non-alcohol beer segment in all European markets, both in terms of overall volume growth and the flourishing choice of styles and brands on offer. As brewers respond to the evolving demands of consumers, this should be seen as a positive development that can support beer consumers in making responsible choices and also contribute to an overall reduction of alcohol consumed in the market. We can safely predict that the popularity of non-alcohol beer will continue to grow, with many countries looking to Spain where, year on year, non-alcohol beer consistently represents over 15% of the beer consumed in Spanish households and it is standard to see non-alcohol beer available on tap in bars. I believe Poland, with its innovative beer market and health-conscious consumers, will become one of the new leaders of the non-alcohol beer revolution.



2.3 Zero alcohol beer comes as a response to the key trend: **better for you** We are reducing alcohol consumption and slashing the number of calories

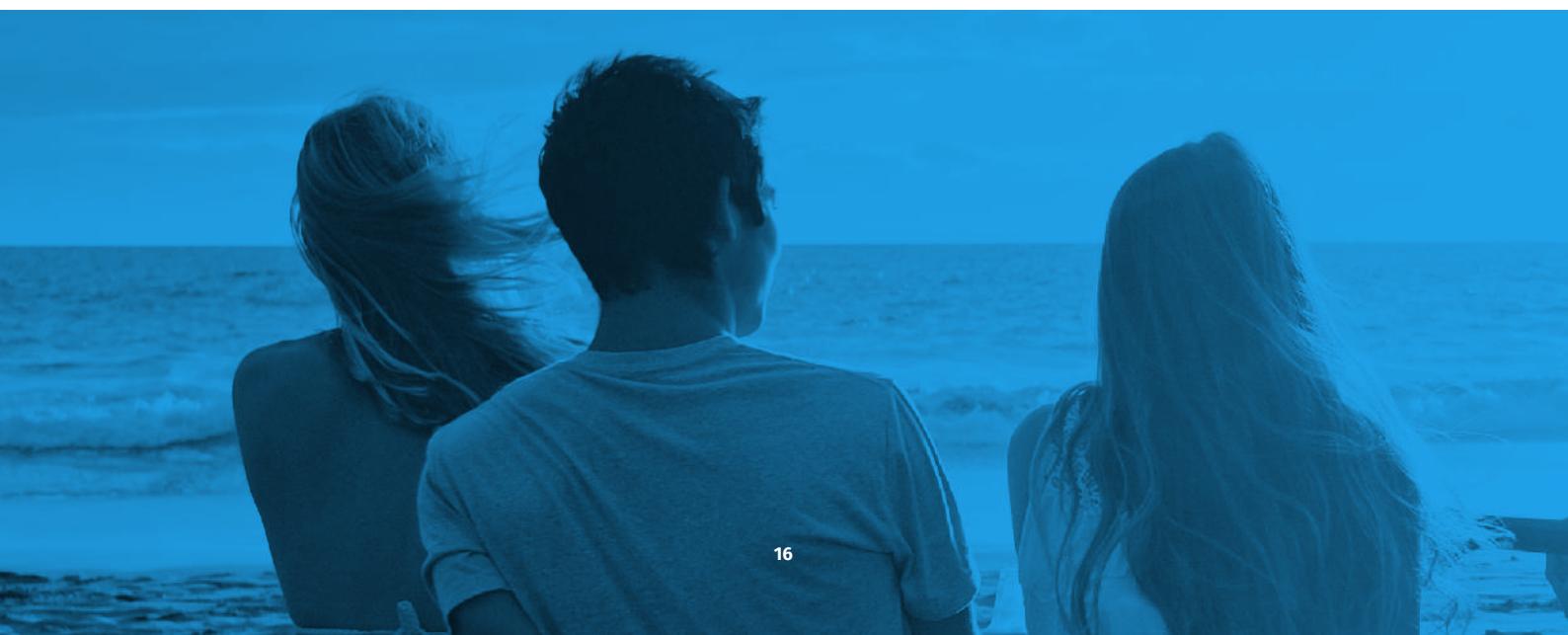
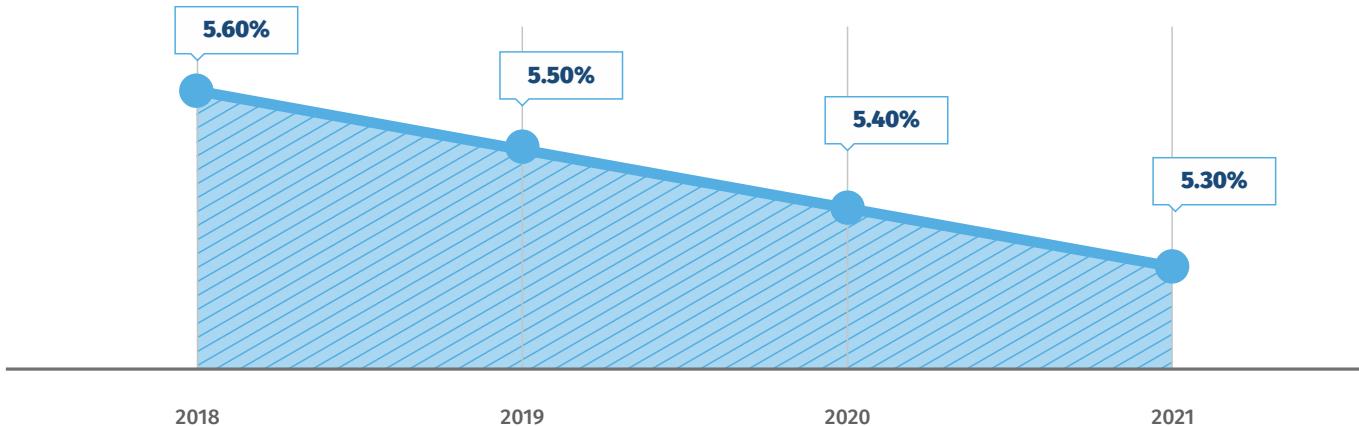
The impressive explosion of the non-alcoholic beer category comes as a direct response to a consumer trend that is dominating the global food market : **the quest for BFY (Better For You) products**. We want to have a healthy diet, because we believe that good food is the cornerstone of healthy life. In 2021, nearly three quarters of Polish consumers interviewed by IPSOS argued that food has big, very big or even decisive impact on their health. Only one in three respondents agreed with this statement in 2008.

In case of beverages, including alcoholic ones, BFY products are products that enable users to reduce alcohol consumption and slash the number of calories. Zero alcohol beers are perfectly aligned to the BFY trend and are in fact the largest category among alcoholic beverages to so broadly embrace the consumer demand for products that come with no alcohol, are low in calories and, on top of that, taste like beer. Analysts of the global alcoholic beverage market (Mintel, IWSR) predict that **zero alcohol beers will be the most important factor in the growth of the beer category in the years to come**.

In addition to a surge in the zero alcohol beer segment, for several years in Poland we have been witnessing a parallel decline in consumption of alcoholic beer, mainly lager. Strong beer is the fastest declining market segment, what reflects a consumer trend as well as a conscious policy of leading breweries. As a result, **the average alcohol content in beer and the share of beer in alcohol consumption in Poland are declining by the year**.

The average alcohol content in beer 2018-2021

Source: NielsenIQ





Professor Andrzej M. Fal

MD, PhD

Physician, economist, a specialist in internal medicine, allergology and public health.

The President of the Board of the Polish Public Health Association.

Would Shakespeare say "much ado about nothing...?"?

For several years, alcohol-free beer that has a history spanning more than four decades has been rising in prominence in terms of volume, percentage and gaining a foothold in culture on all European markets. This is the after-effect of development of essential technologies as well as a significant evolution in the lifestyle and partying patterns.

The initial period was dominated by "low-alcohol" beer, or beer that complied with the legal criterion, but contained approx. 0.5% ABV. But then... This category is now dominated by zero alcohol beers that are ultimately alcohol-free. What does it mean? This is yet another positive sign of social awareness - we want to have beer for its taste, and not alcoholic content. Beer - a beverage whose legacy in Poland is longer than that of vodka - has retained its edge without alcohol whose tiniest amount poses a threat to safety in the short-term and a threat to health in the longer perspective. Equally important for many zero alcohol beer drinkers is probably its low calorie content. As a result, one of the historic attributes known as the beer belly may become a thing of the past. From the perspective of the public health, and especially development of noncommunicable diseases, lower alcohol consumption and prevention of obesity are extremely good news.

Widespread approval for zero alcohol beer and its growth that outpaces the growth of the traditional beer sector mark a lasting change, another step forward towards reduction of consumption of beverages with high alcohol content in Poland and a shift towards low-alcohol beverages: beer, wine and cider.

All in all, it does make sense to make "much ado."
To your health!

3 Polish 0.0% beer consumers

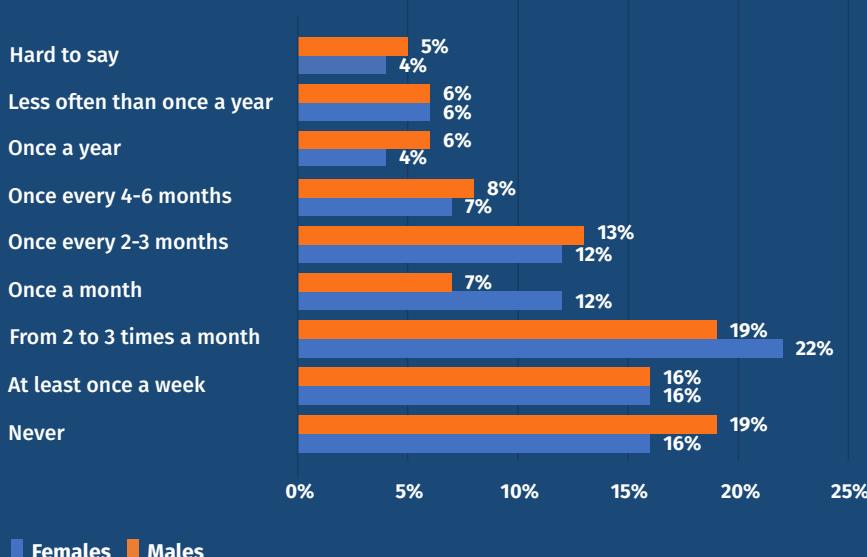
3.1 Who drinks non-alcoholic beer?

Consumer profile and non-alcoholic beer consumption patterns

Nearly a half of Poles opt for non-alcoholic beer at least once a month

Research conducted in July 2022 by IQS¹⁰ for the Union of Brewing Industry Employers in Poland reveals that 78% of consumers aged 18-64 consume non-alcoholic beers with varied frequency. 46% drink non-alcoholic beer at least once a month, while 16% have it at least once a week. Women are keener to opt for non-alcoholic beer than males - half of them drink non-alcoholic beer at least once a month (vs. 42% of males). Females also declare that unlike males, they tend to choose non-alcoholic beer over its alcoholic varieties.

How often do you drink non-alcoholic beer? (females vs. males)

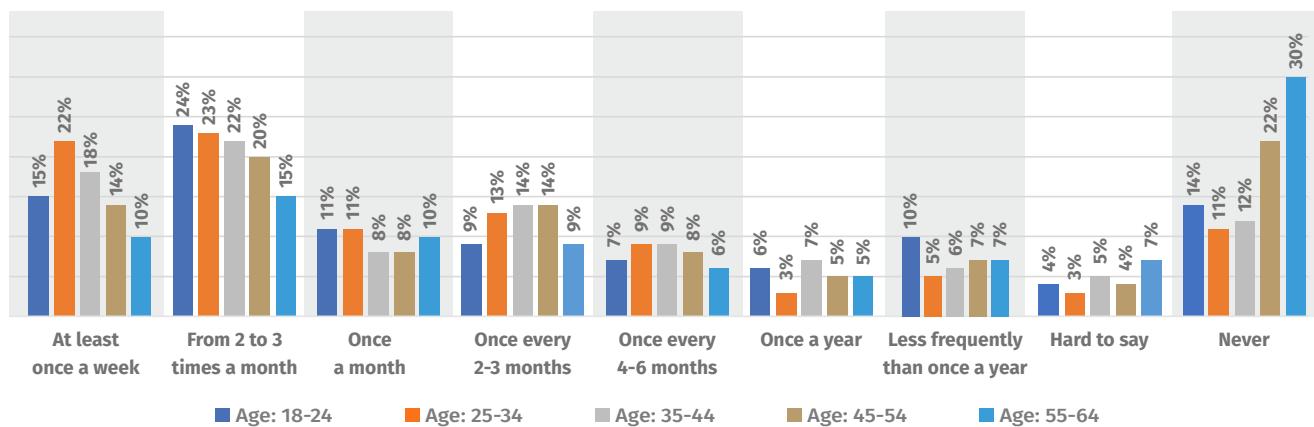


Source: DIY study on Omnisurv platform by IQS, July 2022



Differences in the frequency of consumption of non-alcoholic beers are also visible among various age groups, with zero alcohol beers being most popular among consumers aged 18-44. 50% of 18-24 year olds, 56% of 25-34 year olds and 48% of consumers aged 35-44 drink them at least once a month.

How often do you drink non-alcoholic beer? (demographic groups)

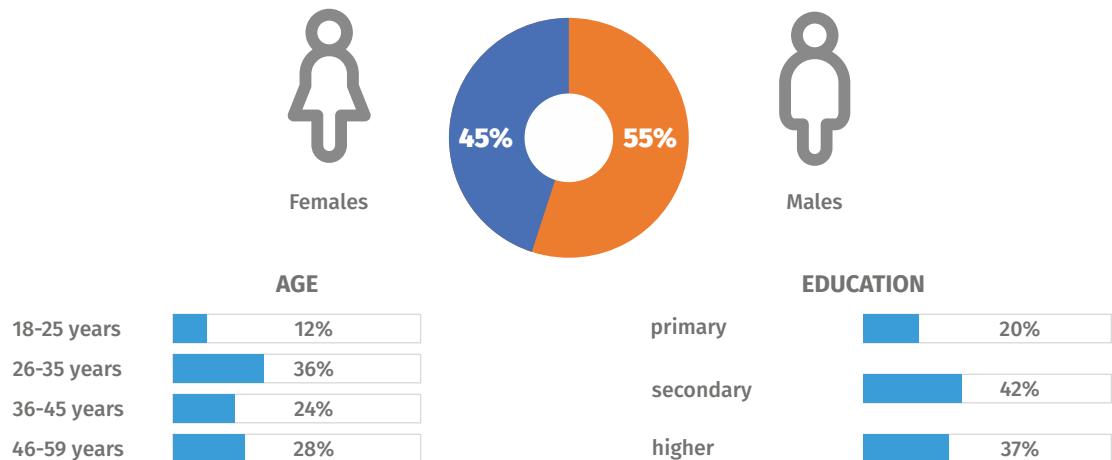


Source: DIY study on Omnisurv platform by IQS, July 2022

Males: 0.0% lager; females: 0.0% radler or shandy

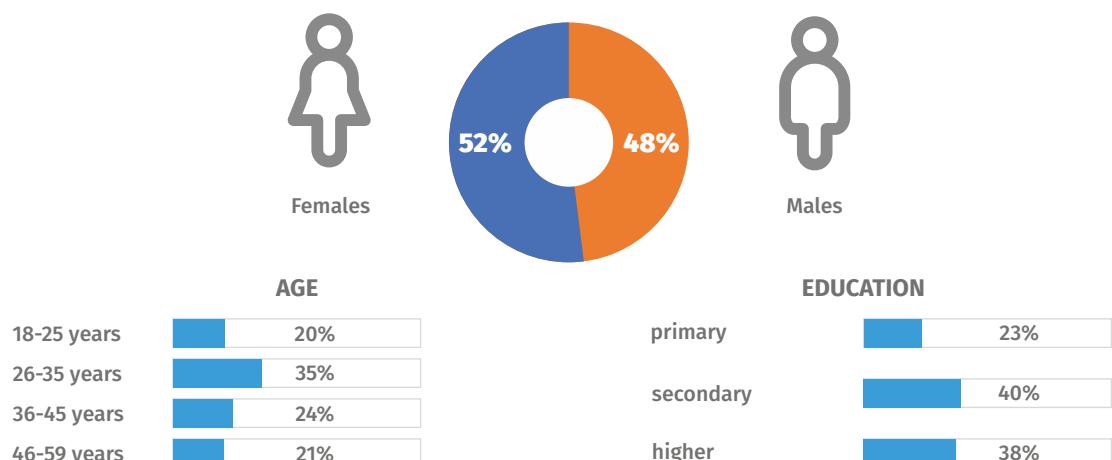
The zero alcohol beer segment features two main segments: **alcohol-free lagers** and **zero alcohol flavoured beers**. Findings of 2021¹¹ IPSOS studies on non-alcoholic lager users reveal that most of them are males (55%). The age structure in this segment is older compared to the overall non-alcoholic beer category.

Demographic profile of 0.0% lager consumers



The non-alcoholic flavoured beer segment (radler and shandy types) has a different consumers' group. Findings of the above IPSOS studies reveal that most of them are females (52%), and more than 50% are consumers aged 18-35 years, while 78% have secondary or higher education.

Demographic profile of 0.0% flavoured beer consumers



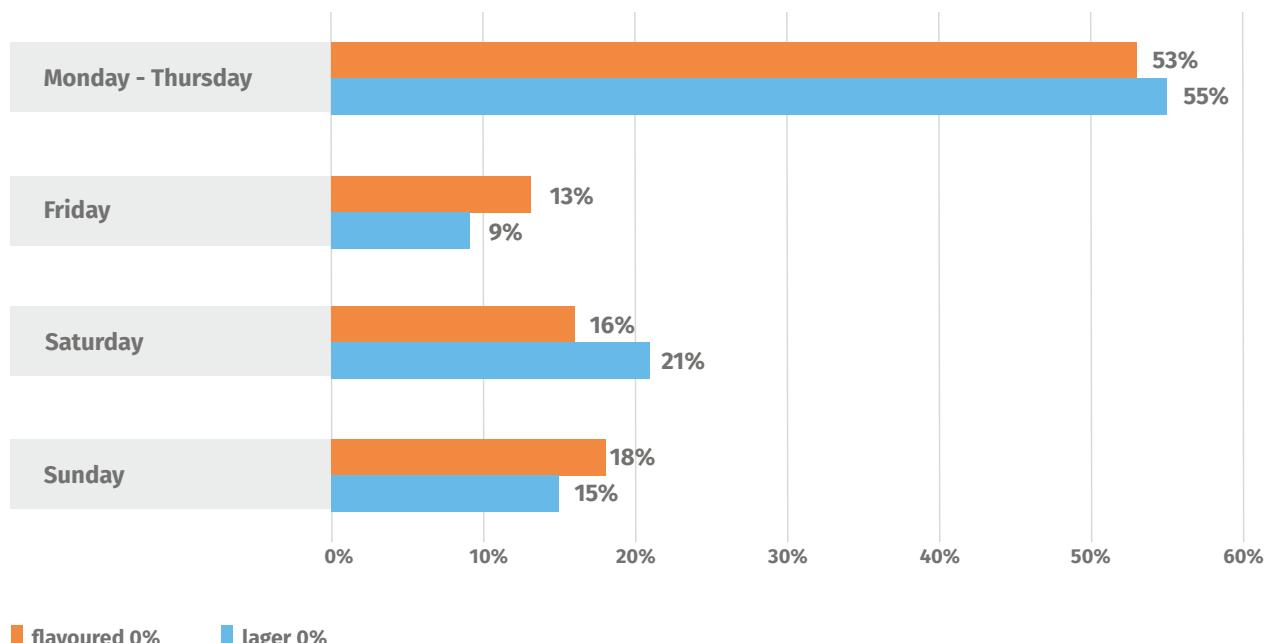
At home, with friends and after hours

Consumers of zero alcohol lager usually drink it at home (57%) or at home of someone they know (26%), alone (42%), in the company of their nearest and dearest (33%) or in small groups with friends (10%). Non-alcoholic lager responds to their need for refreshment (24%), spending jolly good time (21%), relaxing and unwinding (16%)¹².

Non-alcoholic flavoured beers are rather associated with being in the company of others and spending time off together. Users of these beers rarely decide to have them alone (30%). They are usually accompanied by a partner (34%), a friend (12%) or a group of friends (17%). More often than users of 0.0% lagers, they drink zero alcohol flavoured beer outdoors (8%), at their allotments (6%), although their home or the home of a friend (56% and 17%) remains the main venue for consumption. Non-alcoholic flavoured beers embrace their need for spending jolly good time after hours (22%), refreshment (21%), reward and indulgence (15%)¹³.

Findings of an earlier study into the profile of zero alcohol flavoured beer users implemented by IQS within the framework of the NeedforBeer project in 2020¹⁴ present an even more feminine edge of this non-alcoholic beer category (58% of consumers are females) and reveal that most users are aged 18-24 years (28%). Findings of the study also stress that more than a half of occasions to drink non-alcoholic beer take place from Monday through Thursday (these days account for 55% of occasions for 0.0% lagers, and 53% for 0.0% flavoured beers). Consumers drink zero alcohol beer mainly after hours - more than 90% of situations for non-alcoholic beer consumption accounts for 4 pm until 11 pm, while 0.0% flavoured beers are usually consumed in the evening (60%).

Non-alcoholic beer consumptions - days of the week



Source: IQS NeedforBeer 2020

The pattern of consumption of non-alcoholic beer reveals that consumers demonstrate a responsible approach to alcohol. They opt for zero alcohol beer on weekdays to be ultimately ready to carry on with their professional duties. Only over weekends they may treat themselves with alcoholic variants of the golden brew, and this is when consumption of zero alcohol beer is dwindling.

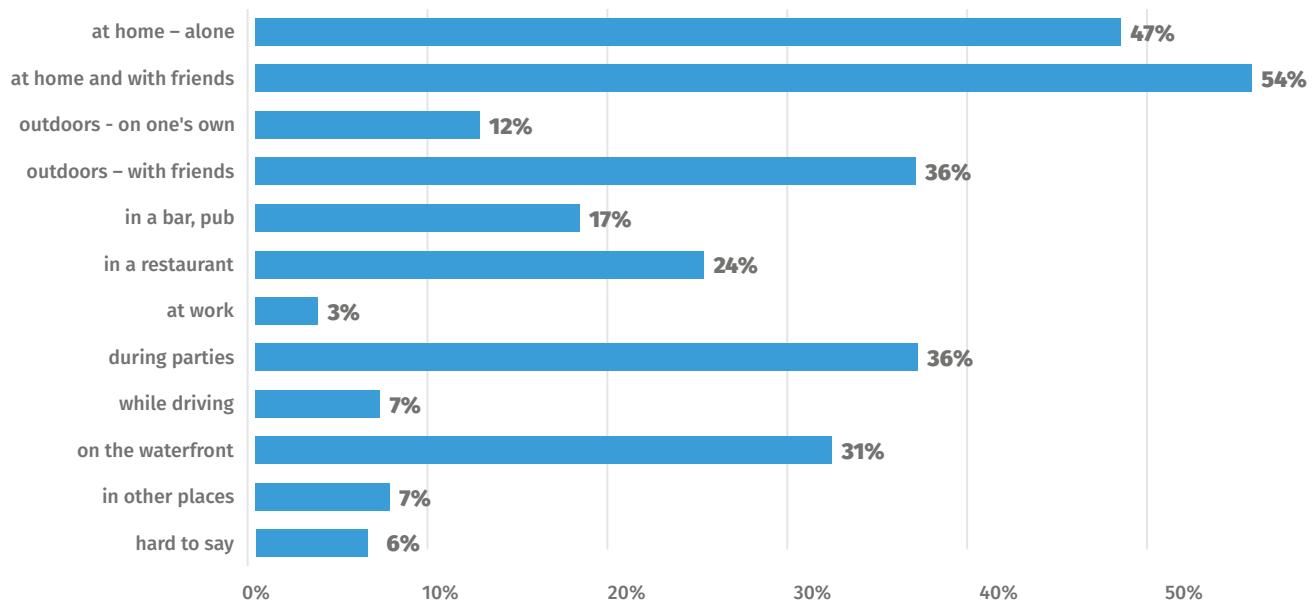
Non-alcoholic beer consumption - times of day

	lager 0%	flavoured 0%
early morning (6-10 hrs.)	0%	0%
before noon (10-12 hrs.)	0%	0%
early afternoon (12-16 hrs.)	12%	7%
afternoon (16-19 hrs.)	40%	31%
evening (19-23 hrs.)	45%	60%
night (23-6 hrs.)	2%	2%

Source: IQS NeedforBeer 2020

IQS NeedforBeer study from 2020 was carried out during the period of pandemic restrictions, including those that hampered operations of the hospitality sector, what may not ultimately reflect regular consumer practices. Findings were verified by the Union of Brewing Industry Employers in Poland in this year's IQS study conducted in July 2022. One's own home or the home of a friend are still the main venues where consumers drink zero alcohol beer. However, respondents indicated many other locations where they have zero alcohol beer, including outdoors, leisure on the waterfront, restaurants and bars plus parties.

What are the places where you tend to drink zero alcohol beer?



Source: DIY study on Omnisurv platform by IQS, July 2022

The non-alcoholic beer category which has been growing dynamically for several years has become a regular fixture in the beer universe. We also see that very often non-alcoholic beers have shifted from the status of a beverage chosen "instead," "when I can't drink alcohol" (usually while driving) to consumers' preferred choice, or in case of some consumers – zero-alcohol beer has become the only choice, especially in case of 0.0% flavoured beers. What should be stressed are differences in consumption of different zero alcohol beer types: younger people and females are more likely to opt for non-alcoholic flavoured beers, while males go for non-alcoholic lagers. Factors behind choosing these types of beer vary - young people usually drink it because they lead an active, sporty lifestyle, while older consumers are driven by professional (work, responsibilities) or health reasons.



Radosław Soszka
Business Unit Director,
a researcher specialising in beer for nearly 20 years,
the creator of the syndicated NeedforBeer research
- a study describing consumption and purchase
of different beer varieties whose sixth edition
will be released in 2022.

3.2 Non-alcoholic beers - a choice for reason and pleasure

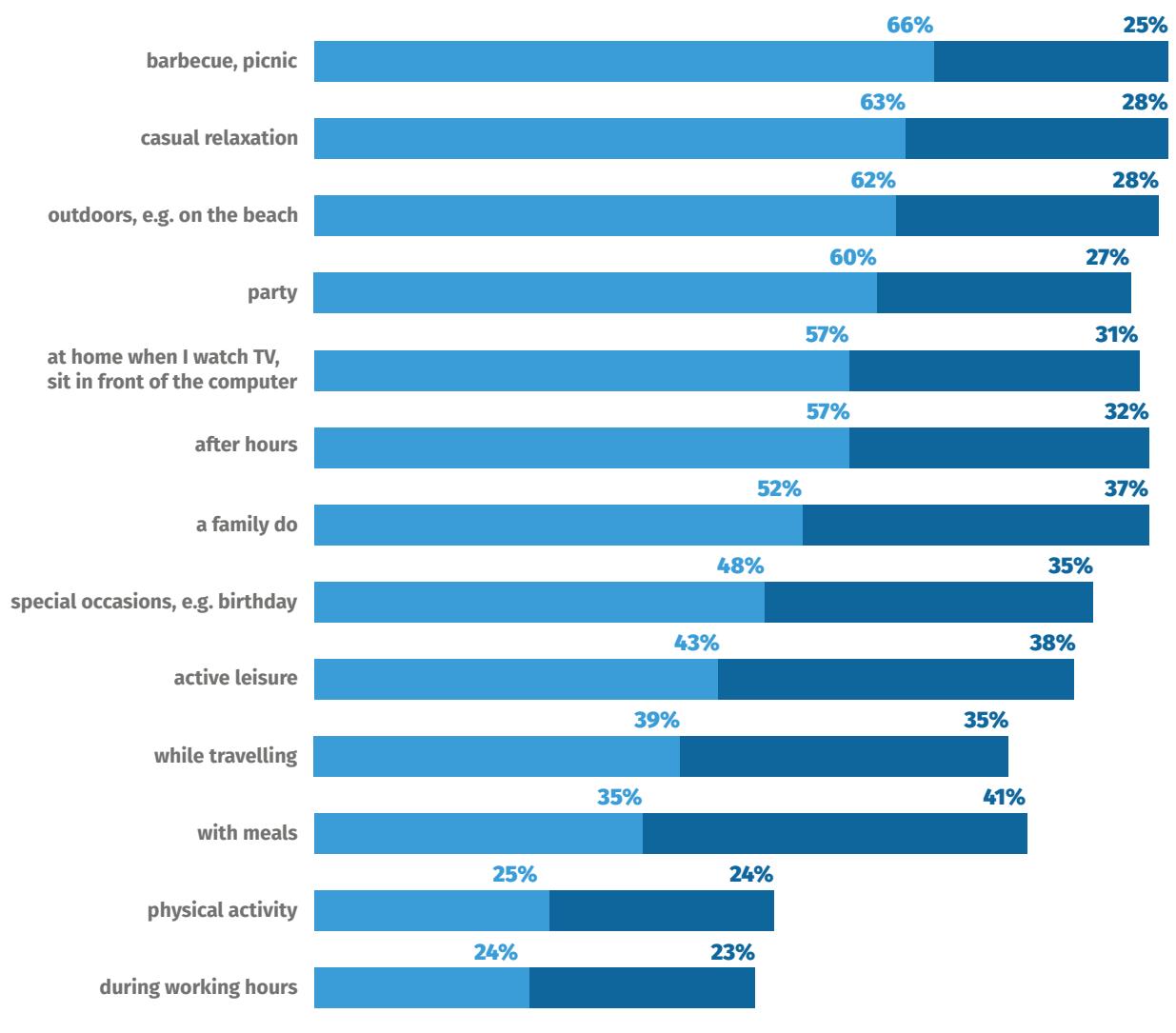
Consumer needs and motivation

Reasons that drive consumers to choose zero alcohol beer are rational and testify to the growing sense of responsibility for one's health and actions. **Numerous studies conducted both in Poland and globally provide one simple answer to the question "why do we choose non-alcoholic beer?" - because we like the taste of beer, but we don't want to be under the influence of alcohol.**

Reasons behind reducing alcohol consumption or quitting alcohol altogether result from a change in the lifestyle or greater concern about health. Zero alcohol beer seamlessly fits the trend of selecting Better for You products. In addition, consumers choose not to drink alcohol in many situations - while sitting at the wheel, looking after children, or relaxing on the waterfront. These reasons continue to be listed by respondents as drivers that most frequently motivate them to opt for zero alcohol beer.

In the past, non-alcoholic beer was seen as an inferior substitute of "regular beer," primarily for drivers. Today, it is a complete product category with diverse varieties, flavours and aromas. It satisfies consumer expectations from beer as a refreshing beverage we like to relish in the company of others and for sheer pleasure. Meanwhile, absence of alcohol in alcohol-free beer makes it a universal beverage for adult consumers that fits multiple situations and occasions. These are mainly outdoor occasions such as barbecues, picnics, beach outings or typical beer-drinking occasions like parties, casual relaxation or after hours. More frequently than males, females are likely to opt for non-alcoholic beer during barbecue, relaxation, sun-bathing, but also at parties, after hours or during family dos. Meanwhile, males are more likely to have non-alcoholic beer during active leisure, while travelling, during physical workout and at work.

Fitting situations for non-alcoholic beer

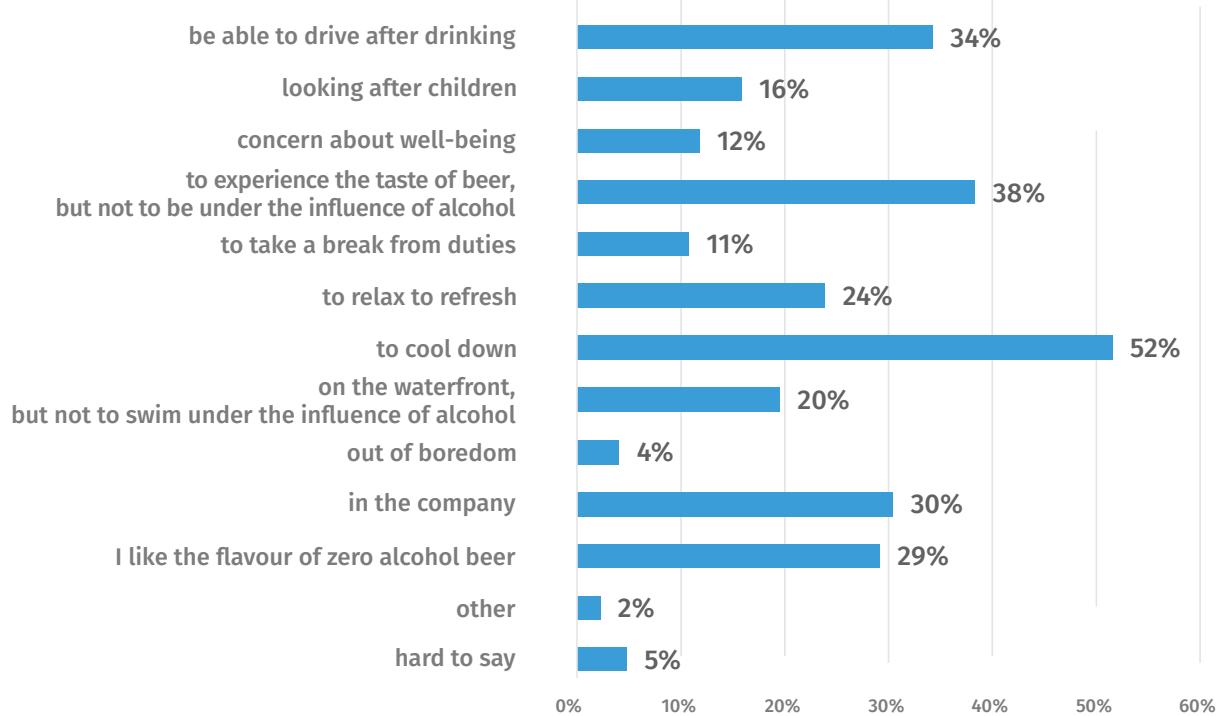


Source: IQS for Kompania Piwowarska, June 2020

definitely fits

rather fits

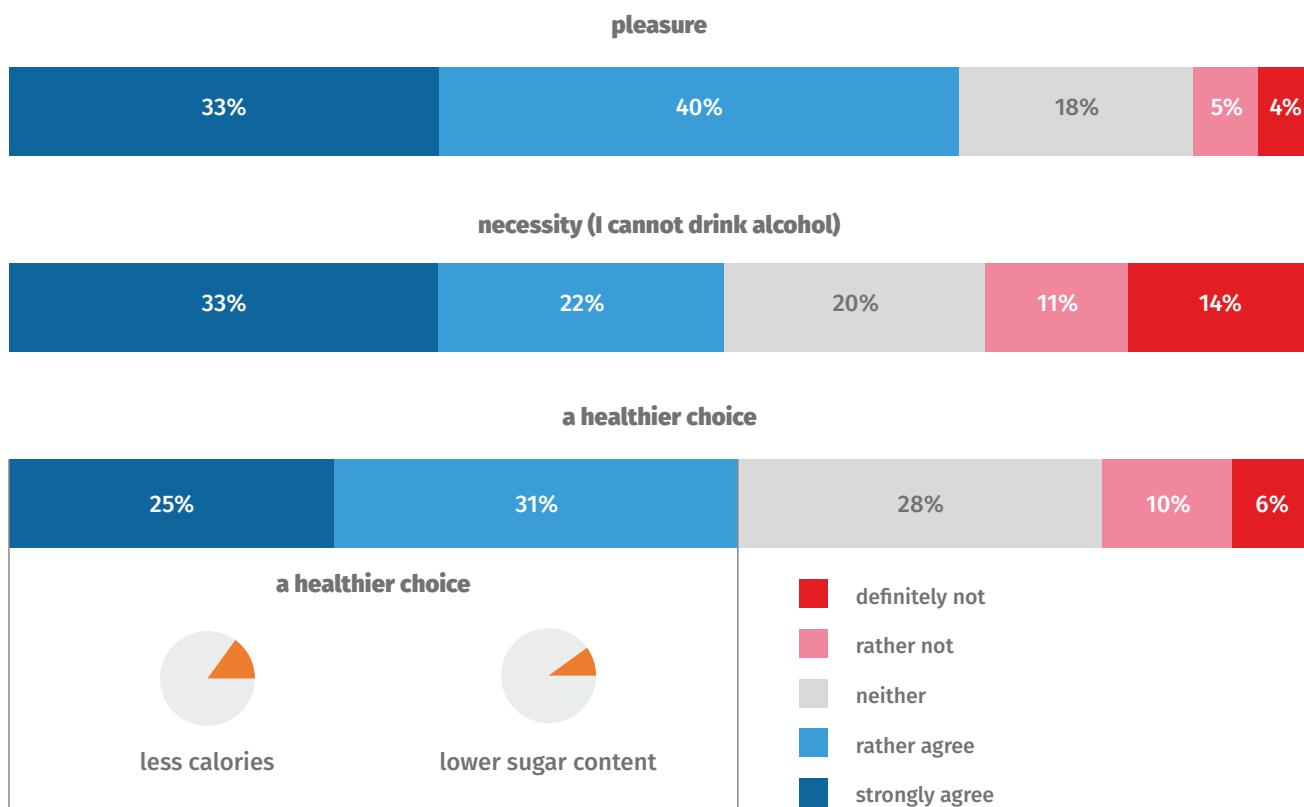
What are the most frequent reasons for choosing non-alcoholic beer?



Source: DIY study on Omnisurv platform by IQS, July 2022

YELOVERS¹⁵ qualitative survey from April 2022 reveals that three main motives for choosing non-alcoholic beers are pleasure, the need to quit alcohol and a healthier choice.

Motives driving the choice of non-alcohol beers



Source: YELOVERS, qualitative research for Kompania Piwowarska, April 2022

“Pleasure” as a driver for choosing non-alcoholic beer is associated with the need for refreshment, relaxation, unwinding, and reward. Zero alcohol beer allows users to take a break from their duties and unwind, and later return to work without potential consequences that may be triggered by consumption of an alcoholic beverage.

Consumers opt for zero alcohol beer to be able to drive, to provide safe care to a child, or not to risk feeling bad at work after drinking alcohol.



Paweł Zadroga,
Business Unit Manager,
a researcher
for more than 20 years
conducting quality
research into beer

Many qualitative surveys conducted by IQS into motives behind selection of non-alcoholic beers point out to other social and emotional factors that drive the choice of zero alcohol beer.

On the one hand, the choice of such beer confirms in the eyes of peers the image of its user as a person who is responsible and in control of his/her life, but also points indirectly to the image of a modern person who is in tune with trends, open-minded and able to enjoy diversity. An emerging motive for choosing non-alcoholic beers are also dietary trends related to the need to reduce sugar and cut down on unhealthy food in the diet. That is why non-alcoholic flavoured beers, especially radlers, are perceived as a healthier, less sugary alternative to carbonated sweetened beverages. In this context, it is a more “serious” version of carbonated beverages, for adult consumers.

In addition, following rapid development of the zero alcohol flavoured beer category, consumers have more opportunities to discover exciting fruity flavours as well as combinations of fruity flavours with other additives (there are basically no limitations in this respect). Therefore, zero alcohol flavoured beers are embracing the need to break from the mould, escape the daily grind and the routine, and introduce a breath of fresh air to daily life. Such diversity is hardly demonstrated by any other beverage category.

3.3 Non-alcoholic beer for conscious, adult consumers

How do Poles perceive zero alcohol beer users?

In an intriguing study conducted by IPSOS for Kompania Piwowarska in June 2020, users of non-alcoholic beers were asked to describe who – as they believe – zero alcohol beer is geared for. The study presents the portrait of an adult, a mature and responsible consumer of the zero alcohol beer category who is making conscious choices¹⁶.



FEMALES AND MALES

Non-alcoholic beers are unisex, they are no longer perceived as not very masculine and geared mainly for women.



ACTIVE, LIVING IN THE FAST LANE

They live fast, juggle multiple roles and activities. They like the taste of beer and don't want and cannot let alcohol compromise their stamina or distort the rhythm of life.



THE ADULTS AND THE MATURE

They take responsible decisions, refuse to give in to the peer pressure. They know what they want. They don't have to drink alcohol to feel better or have a good time.



SERIOUS AND COMMITTED TO WORK

Zero alcohol beer is associated with serious professions that involve major responsibility and require focus (scientists, medical professionals).



PHYSICALLY ACTIVE

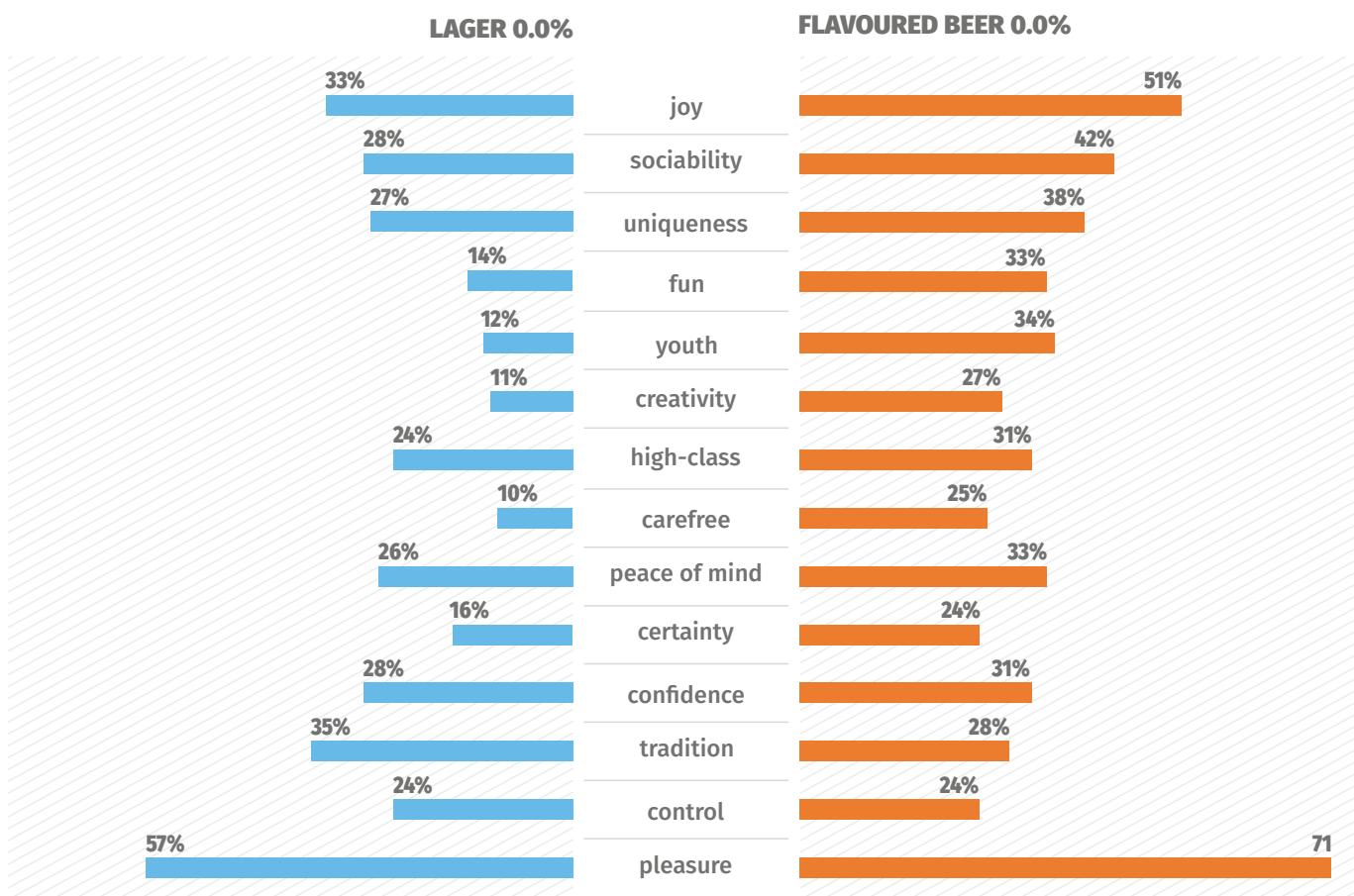
A sporty person who is on a diet, when alcohol is not advisable.

4 The image of non-alcoholic beer

Pleasure + a healthier choice

On the one hand, Poles perceive non-alcoholic beers in the context of fun and pleasure and, on the other, through making an informed choice which is more beneficial for health. Zero alcohol beer brings to mind many positive associations which are generally attributed to the beer category: refreshment, fun, relaxation, leisure, spending time off in the company of friends, a sense of belonging to a group. Meanwhile, consumers perceive non-alcoholic beer as a reflection of a responsible choice, common sense and retaining control.

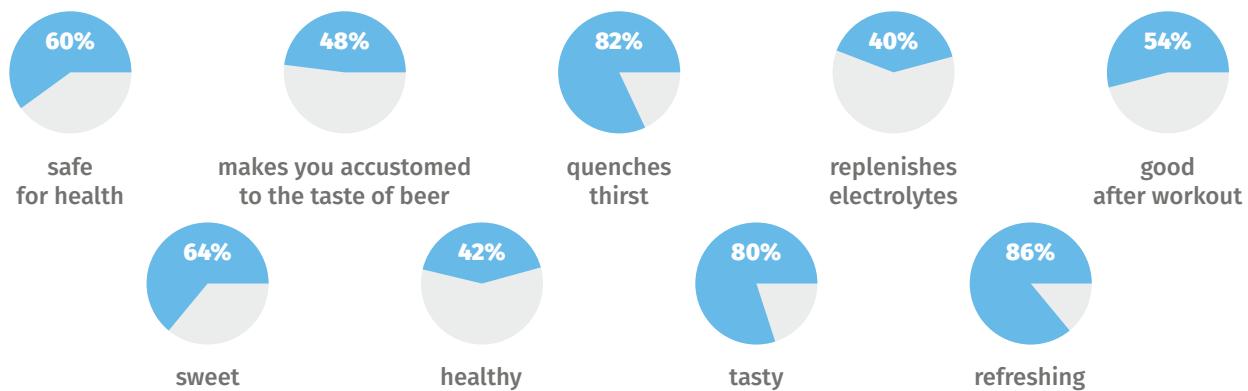
Emotional image: 0.0% lager, 0.0% flavoured beer



Source: IQS NeedforBeer 2020 for Carlsberg

Non-alcoholic beer is ...

The sum of answers „I agree” and „I rather agree”

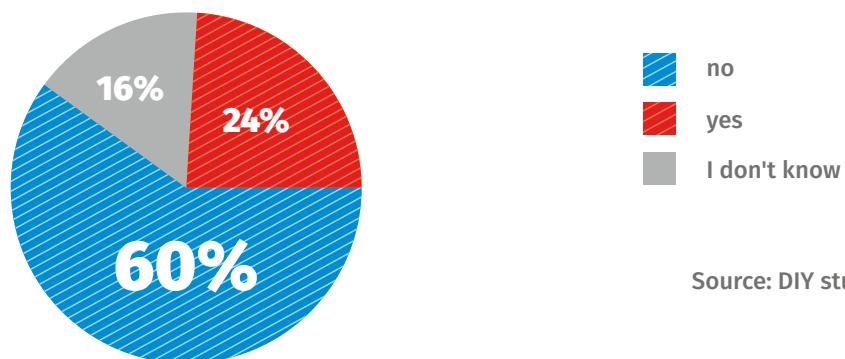


Source: DIY study on Omnisurv platform by IQS, July 2022; N=823 – non-alcoholic beer users

Non-alcoholic beer not for the minors

60% of Poles would not let their child or another minor have non-alcoholic beer. The percentage of negative answers is significantly higher for two demographic groups – 68% in the group of 55-64 year old respondents (possibly grandparents) and 65% in the group aged 35-44 year (possibly parents of underage children). Looking after children is a situation which as consumers believe is inappropriate for drinking even zero alcohol beer. Interviewees argue that adults who drink alcohol-free beer while taking care of children are setting a bad example.

Would you let a minor/your child have non-alcoholic beer?



Source: DIY study on Omnisurv platform by IQS, July 2022

The beer industry in Poland applies the highest ethical standards to sales and promotion of all types of beer, including non-alcoholic beer. **Beer producers believe that the entire beer category, including non-alcoholic beer, is geared for adults only.** Therefore, breweries do not communicate or suggest in their promotion or sales activities that non-alcoholic beer could be consumed by minors.

On the contrary, additional information campaigns addressed to sales assistants in stores are implemented to make sure that non-alcoholic beer is not sold to minors, despite the fact that such sale is legal.



Sławomir Grzegorek
Prevention and health
promotion expert

Representatives of the sector are right to identify that reasons behind the growing interest in non-alcoholic beers include cultural changes, especially among young people. Drinking alcohol is not hip anymore. More and more people are focused on a healthier lifestyle. It's hip to be fit just like it is hip to make sure you get enough sleep, reduce your stress level and reduce the use of stimulants, including alcohol. Consequently, the quality of our work as well as interpersonal relations are improved.

Non-alcoholic beer is a great alternative for beer enthusiasts who do not want or cannot consume alcoholic beverages, but have a penchant for the golden brew. Every person who leads a healthier and safer life is an actual asset for the society.

I would also like to stress that although they contain no alcohol, non-alcoholic beers are not recommended for two social groups: minors and individuals in alcohol use disorder therapy. Regulations allow for consumption of non-alcoholic beer by minors, what yet has an undesirable formative effects. It forms non-constructive attitudes of young people and gets them ready for future consumption of alcoholic beverages. The second group that should steer clear of non-alcoholic beer are people in addiction therapy for whom it may become a "trigger" leading to relapse of the alcohol use disorder.

To recap, development of non-alcoholic beer production may trigger a wide-ranging change in the consumption pattern of alcoholic beverages (and lead to its reduction), what would be beneficial for producers and consumers alike.

5 The future of the beer market

Trends

Three key trends in Poland are driving changes in the beer culture and beer consumption patterns. The main driver is the impressive growth of the non-alcoholic beer segment triggering a steady expansion of the range of breweries with non-alcoholic lagers, flavoured beers, and beer specialties. Meanwhile, we see a gradual decline in interest in the largest beer category - the alcoholic lager segment whose sales have been declining for several years. Major decreases are seen primarily in the strong beer segment whose value and volume have gone down from -4% to -5% in the past two years.

The beer specialty category and premium products are growing steadily as consumers are becoming keener to choose higher quality, more expensive and more sophisticated beers. This beer segment is still not large compared to lagers, but it has grown by 20% in 2021 and now holds a 3.9% share in the total beer market (by value).



Iwona Jacaszek-Pruś
Corporate Affairs Director
at Kompania Piwowarska

Kompania Piwowarska plays a very special role in development of non-alcoholic beers: launched nearly 20 years ago, our Lech Free was the pioneer in the category. Today our beers with zero alcohol content account for more than 41% of the market in Poland.

The fact that the non-alcoholic beer segment continues to grow despite unfavourable market conditions reflects its massive strength and appeal for consumers who have discovered that non-alcoholic beer well responds to various needs and offers benefits in various situations - not only when drinking alcohol is not recommended. We are very excited to see this mindset which is aligned to the responsible approach to beer consumption we are promoting - not "more," but "better." It also fits our strategy which is promoting responsible consumption of our products and our plan to achieve a 20% share of non-alcoholic beers by 2030.

There is still room for development of the non-alcoholic beer category in Poland. Consumer appreciate their great flavour and a wide range that caters to different preferences, and they opt for non-alcoholic variants that fit their active lifestyle and responsible choices related to alcohol consumption. On the other hand, in order to satisfy those needs, beer producers are investing in their production capacities. In 2021, Carlsberg Polska launched a dealcoholization installation worth PLN 10 million at Okocim Brewery what will enable us to further expand our zero alcohol beer range. We now have 15 alcohol-free varieties in our portfolio.

It should be stressed that development of the non-alcoholic beer range and providing consumers with a choice is an objective of our ESG Strategy "Together Towards Zero and Beyond" in the area of "Zero Irresponsible Beer Consumption" which provides that 35% of our beers worldwide will be low-alcohol or alcohol-free by 2030 and that we will be providing our clients and B2B partners with 100% availability of non-alcoholic beers by 2030.



Beata Ptaszyńska-Jedynak
Corporate Affairs Director
Carlsberg Polska



Magdalena Brzezińska
Corporate Affairs Director
at Grupa Żywiec S. A.

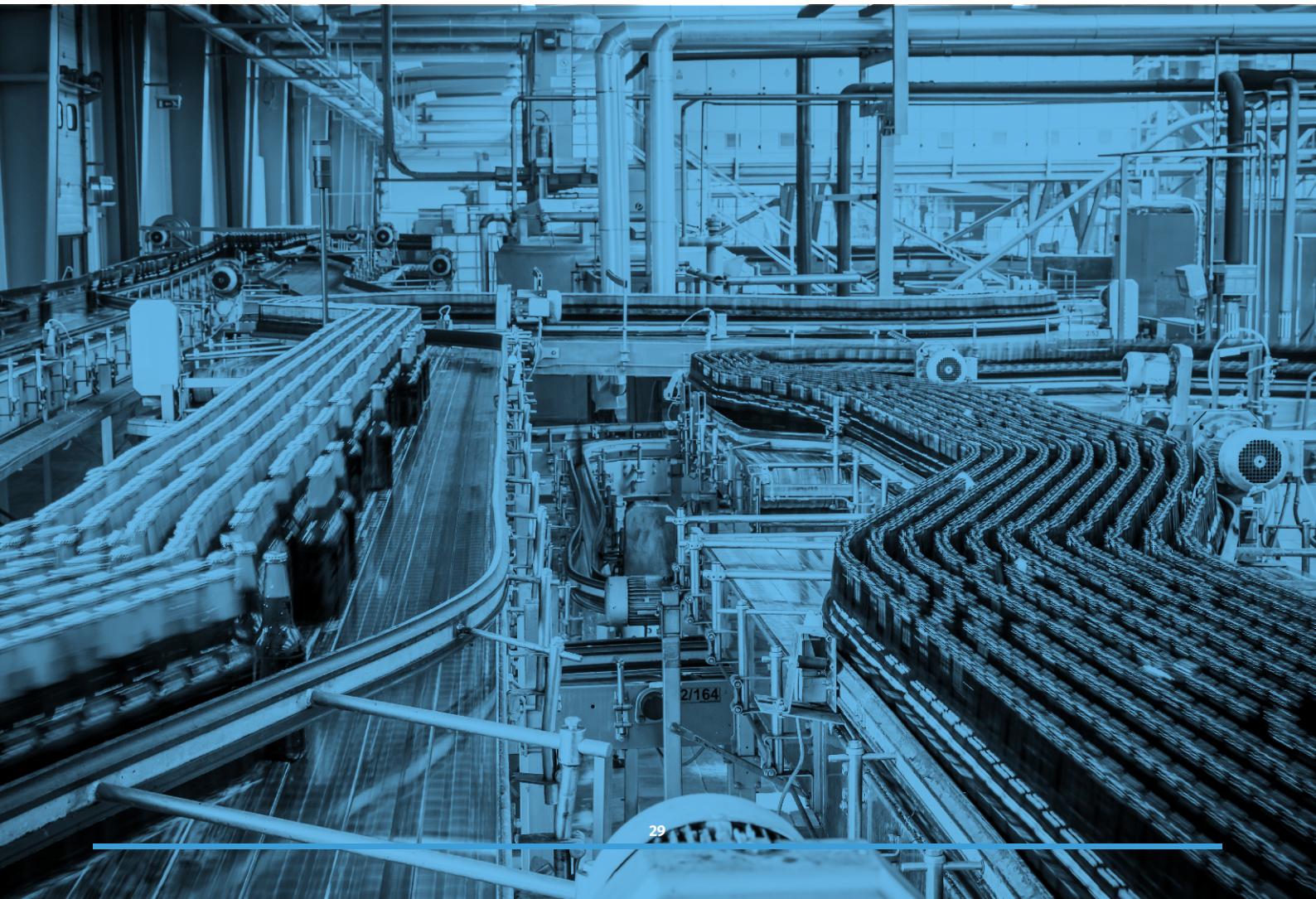
We are proud that we have pioneered development of the non-alcoholic beer category on a wide scale in Poland. We made investment in a vast product range and availability as early as in 2018, when non-alcoholic beer was very much stereotyped. Today, the segment has not only become a fixture on the beer market, but also the most forward-looking.

I am convinced that as the trend for conscious, active and sustainable life continues, non-alcoholic beers will be growing and their best years are yet to come.

Evolution

Trends and changes in individual segments of the beer market have led to a gradual decline of the alcohol consumed in beer. In 2021, it went down by 5.4%. That is the after-effect of the declining average alcohol content in beer which stood at 5.3% in 2021. Poles drink less beer and consume less alcohol in beer as its content is decreasing every year. From the perspective of the national alcohol policy, these are trends that have a positive impact on health, education and social life and are aligned to guidelines of the public policy in this area.

Beer is in fact the sole category of alcoholic beverages to demonstrate the socially desirable evolution in terms of its consumption structure and culture - the less alcohol a beverage contains, the lower is the risk of its harmful use which has risen in the post-pandemic period.





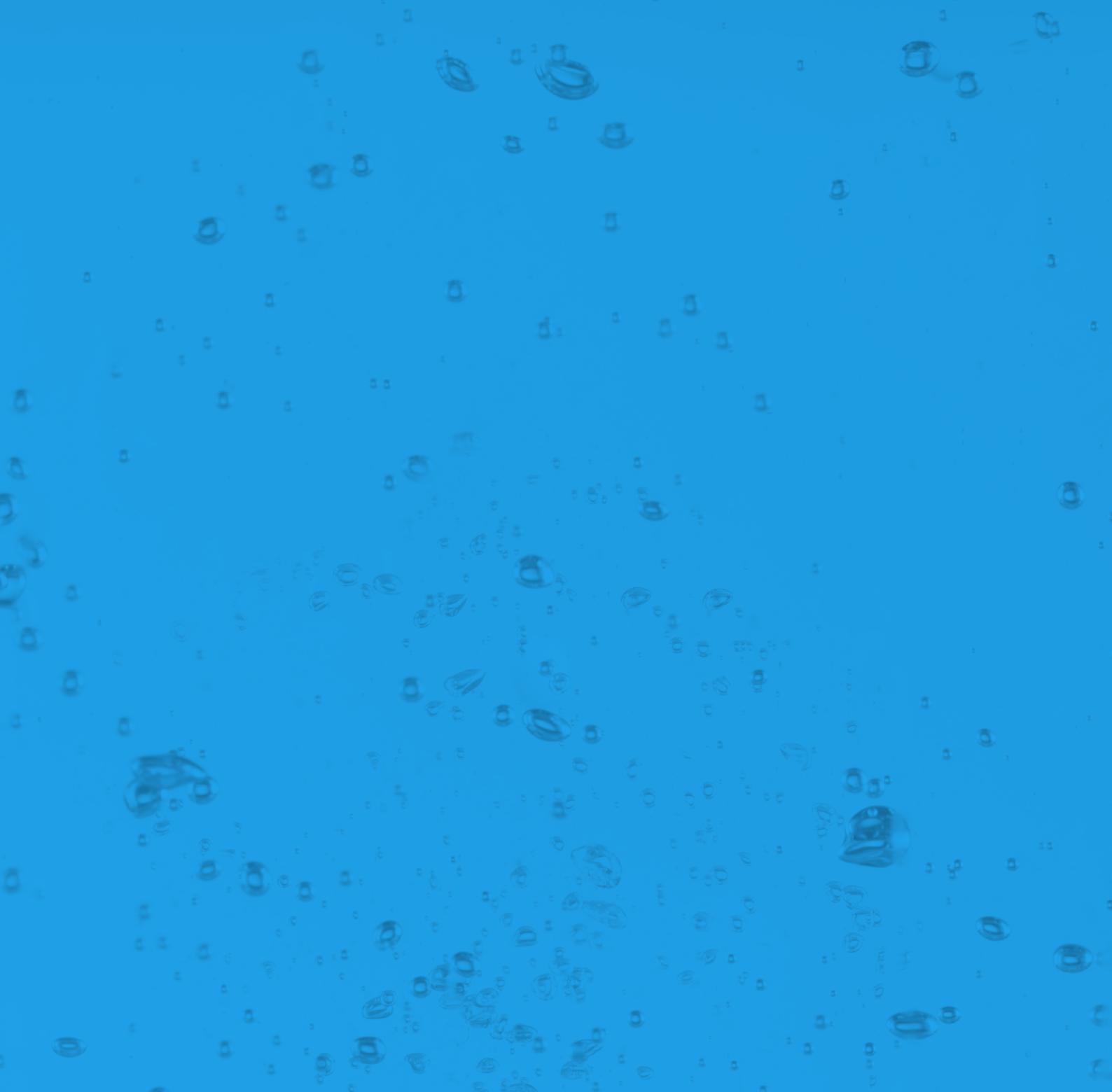
Bartłomiej Morzycki
General Director
The Union of Brewing
Industry Employers
- Polish Breweries

The brewing market is constantly evolving, adapting itself to changing consumer preferences and responding to changes in their lifestyles. This is reflected by dynamic development of the non-alcoholic beer segment and a decline in sales of strong beers. Several years back, non-alcoholic beers had a minor market share, while today we are witnessing a genuine zero alcohol beer revolution. Nearly all breweries large and small are now offering alcohol-free beer - as it has become a necessity in order to satisfy consumer expectations in this regard. Following keen interest demonstrated by beer enthusiasts in this segment, we predict that the non-alcoholic beer range will continue to grow. It's good news for all beer lovers who are seeking for distinctive flavour and refreshment, but want to avoid drinking alcohol. Available surveys prove these are informed, responsible, professionally and physically active people, while zero alcohol beer is embracing their expectations.

The 0.0% revolution on the beer market

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