

THE SOCIO ECONOMIC OF PIVARA SKOPJE IN MACEDONIA 2016







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STUDY SUMMARY

The purpose of the "Socio-economic impact study of Pivara Skopje" is to demonstrate, using an economic model, the extent of Pivara Skopje's impact on the Macedonian economy, including generated gross value added, employment and incomes. Deloitte Sustainability Consulting Central Europe advised Pivara Skopje on preparation of this report between February and March 2017*.

As the NUMBER ONE BEVERAGE PRODUCER present on the market for the intent of Pivara Skopje is to de

the intent of Pivara Skopje is to demonstrate its constant efforts to provide transparency and strengthen the impact in local communities.

An analysis of how Pivara Skopje's activity influences job and wealth creation all the way down the value chain, is made in order to make Pivara Skopje business model

EASIER TO UNDERSTAND

and therefore

TO ENGAGE PUBLIC

interest in the broader economic impact which Pivara Skopje has on the local economy through its actions and presence. Pivara Skopje gives 377 direct*
jobs and generates about 1370 additional
jobs in the Macedonian economy. About

5,980 E

are partly or wholly dependent on the income generated by Pivara Skopje The total income generated through Pivara
Skopje's extended value chain equals to the average monthly gross wages of

25,000 people**

Pivara Skopje's purchases of

33.6 MN €

would allow for financing an investment in around

66 sport halls

About

21.1₩

is paid in taxes through the production and sales of Pivara Skopje's products. This equals to 12% of the total corporate income taxes collected

by the government in 2016.

local suppliers
in its value chain



FOOD AND BEVERAGES SECTOR IN MACEDONIA

Since economic contraction in 2012, Macedonia has been gradually returning to the path of growth and expansion.

The food and beverage sector, which is essential to the development, prosperity and well-being of the country's economy, preserved its role as the most important outlet for the agricultural sector, accommodating jobs for over 24,700 people across 1,677 businesses.

One of the key industries of the sector — the beverage industry — is also beginning to stabilize since the slowdown from 2012 to 2014 the production volume of beer grew by 1.1% and production volume of soft drinks increased by 5.2%. The beverage industry in Q4 of 2015 provided over 3,400 jobs, 20% more than in $\overline{Q4}$ of 2012 — if number of jobs the industry can provide were to grow another 20% by 2019, 687 additional jobs would be created.

An average monthly wage in the beverage industry has also risen since 2012, by 7.9%, which is by 5 percentage points more than the inflation rate during these years. The beverage industry and the entire food and beverages sector will most certainly continue to play a vital role in driving socio-economic progress of the country, through creation of gross value added, jobs, exports and promotion of domestic products.

PIVARA SKOPJE'S BUSINESS OPERATIONS

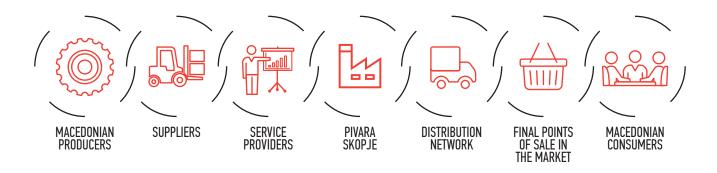
Piyara Skopje AD is a joint venture between Coca-Cola HBC AG and HEINEKEN N.V.

Its success story started in 1922 as the first joint stock enterprise with dominant foreign equity and first brewery in the country. The broad-ranging success is a result of the on-going investments made with a view to present its customers and consumers with the best quality alcohol free beverages and beer.

Pivara Skopje is a producer of internationally recognized Coca-Cola & HEINEKEN branded beverages produced locally in Macedonia, using, to a great extent, locally sourced materials and services. The results of Pivara Skopje activities, ranging from production to sales of its products, far exceed the outcomes most visible to the customers and investors.

Apart from generating local employment and income in its plants, it supports employment, incomes and tax revenues in Macedonia by purchasing goods and services from a variety of suppliers and selling through a widespread distribution network which depend on consumption of Pivara Skopje products as revenue.

PIVARA SKOPJE VALUE CHAIN



KEY NUMBERS

Starting from 35,000 hectolitres beer, 720 tons beer malt and 1,500 tons ice in 1924 to 985,000 hectolitres of bevarages produced today annually More than

40 MN €

capital investments just in the last 10 years

Operating for 93 year

7 core non-alcoholic beverage brands, with more than 60 packages



2 production plants with production capacity of 2 MN hectolitres of non-alcoholic beverages and 1.1 MN hectolitres of beer

4 core beer brands, with more than 70 packages

11 distribution centers throughout Macedonia

13,000 customers Pivara Skopje partners

We proudly believe that every citizen in Macedonia has consumed at least one of our products.



RESEARCH METODOLOGY

Any economy - whether analyzed through a national or global prism - contains of sectors and industries which are interrelated with each other. Within these sectors and industries there are companies whose operations both depend on and influence other companies and economic agents. In order to analyze socio-economic impact of a selected company or industry, one has to therefore use a methodology which considers these flows, and demonstrates how outputs of many different industries serve as inputs to other industries, and in consequence generate value added, employment, and incomes in the economy.

AIMS OF THE STUDY

THIS STUDY SEEKS TO ATTAIN THE FOLLOWING OBJECTIVES:

Establishing a comprehensive assessment of the total impact of Pivara Skopje's business activities including direct impacts, indirect impacts generated through its suppliers, and induced impacts generated through compensation of Pivara Skopje's employees and compensation of employees of Pivara Skopje's suppliers and the employees of suppliers' suppliers.

Thorough evaluation of Pivara Skopje's various impacts within 21 sectors of the Macedonian economy.

SOCIO-ECONOMIC IMPACT MEASUREMENT MODEL

Pivara Skopje relations with suppliers from various economic sectors enable additional creation of gross value added, employment, incomes and taxes throughout the national economy. In order to identify and measure these impacts an advanced economic model was used enabling a quantification of Pivara Skopje's operations effects in direct, indirect, and induced terms.

Using a model based on the Input-Output table for the Macedonian economy* and data from the company, the following types of impacts of Pivara Skopje were calculated:

DIRECT IMPACTS which are the effects of Pivara's Skopje activities itself.

INDIRECT IMPACTS which are related to Pivara Skopje's business transactions with its suppliers.

Pivara Skopje's purchases of goods and services from local suppliers generate business for these suppliers, enabling them to sustain jobs, generate value added, and income. But the effects don't end there — direct Pivara Skopje's suppliers (1st tier) have their own suppliers (2nd tier), whose production due to the initial impulse from Pivara Skopje, also increases, creating a ripple effect in the economy. These effects, including all rounds of transactions, are effectively taken into account in the model used.

INDUCED IMPACTS which are a consequence of an additional impulse created in the economy through spending of Pivara Skopje's employees and spending of employees of its 1st and 2nd tier suppliers. This impulse, which is manifested through effective demand, is then reflected in an increase of output in the economy, and translates into additional jobs, value added, and income generation.

The scale of the direct, indirect and induced impacts is presented in relation to 3 key metrics:

GROSS VALUE Added (GVA)

The value of output less the value of intermediate consumption (the value of products and market services, which the producer uses as inputs in the production process). Gross Value Added (GVA) at basic prices is equal to Gross Domestic Product (GDP) at market prices minus taxes plus subsidies on products.

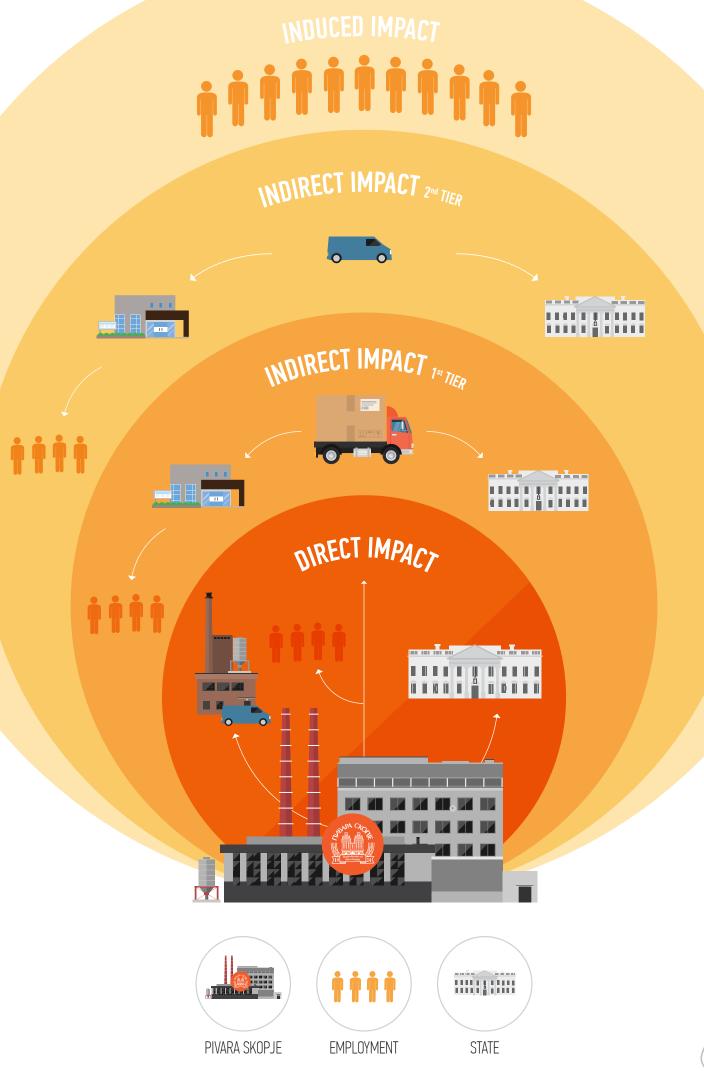
2 EMPLOYMENT

Measured in terms of headcount and including all workforce jobs i.e. employed and self-employed.

03 INCOME

Measured through compensation to employees, which includes wages and salaries, allowances added to salaries, social contributions and taxes on salaries.

Additionally, fiscal impacts of direct and indirect taxes paid by Pivara Skopje are quantified and contextualized in the next section of the report.



SCOPE AND INPUT DATA

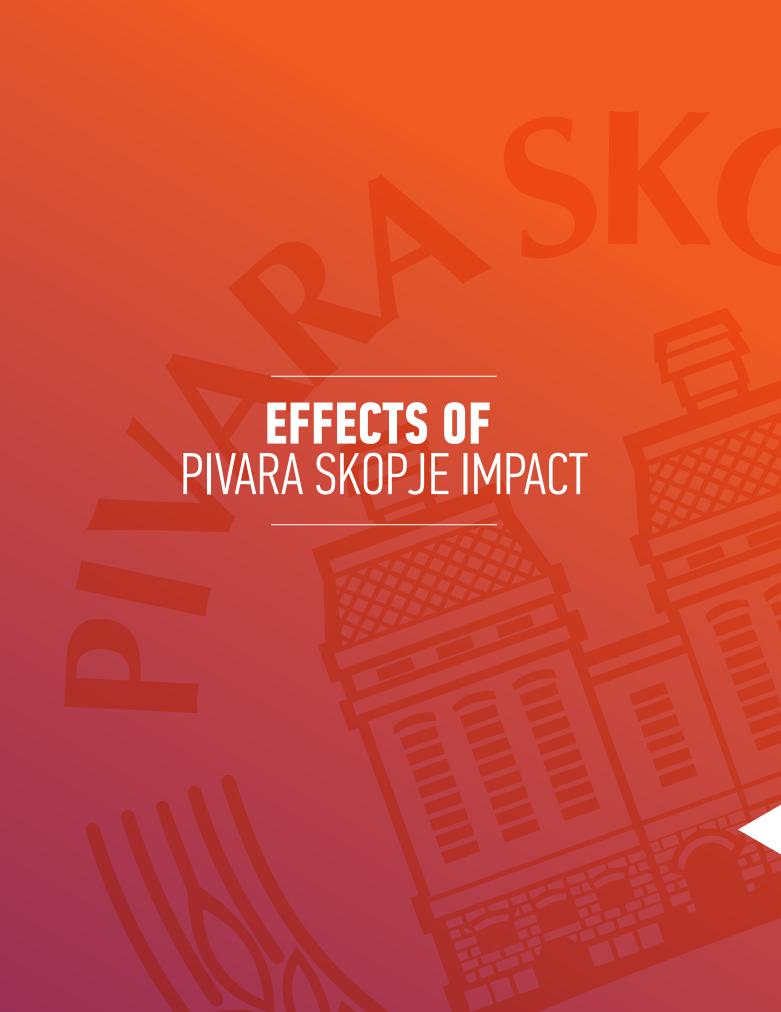
The study focuses on quantification of Pivara Skopje's impacts in the local economy of Macedonia. Therefore, purchases of goods and services from foreign vendors were excluded from the calculations of indirect and induced impacts, as they do not have impact on local employment, gross value added or incomes.

The analysis was created using financial data collected from Pivara Skopje for the year 2016, including:

- the annual balances for profits and losses,
- records of tax payments,
- records of average employment in 2016 (including employees employed directly and through third parties),
- data regarding the purchases separated by local and foreign expenses,
- information about employee wages and personal income taxes collected on their behalf by Pivara Skopje
- · information about Pivara Skopje marketing expenditures

Additionally **The Coca-Cola Company** invested **1.4 MN €** in 2016 in ATL marketing activities.

Statistics and data for compensation of employees and employment (including self-employed) provided by the State Statistical Office were taken for the same year as the symmetrical input-output table 2010 in order to maintain consistent ratios for productivity and earnings.



KEY RESEARCH FINDINGS



GROSS VALUE ADDED

EMPLOYMENT

44.6 MN € 1,747 JOBS 13.7 MN €

INCOME

Direct impact 24.5 MN €

Indirect impact 12.4 MN €

Induced impact 7.7 MN €

Direct impact 377 jobs

Indirect impact 875 jobs

Induced impact 495 jobs

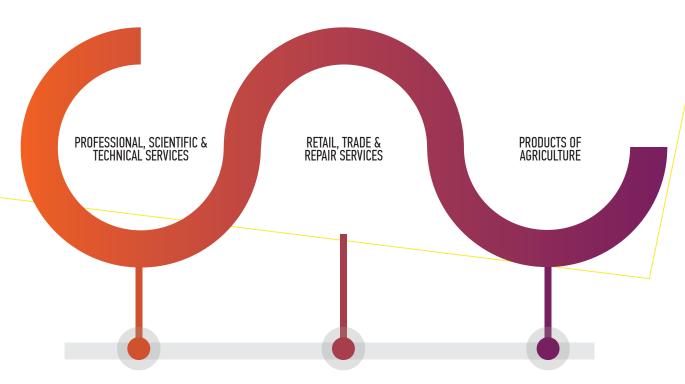
Direct impact 6.4 MN €

Indirect impact 4.5 MN €

Induced impact 2.8 MN €

MAIN SECTORS AFFECTED BY PIVARA SKOPJE'S OPERATIONS

Three main sectors of the economy in which Pivara Skopje makes the greatest impacts have been identified:



Marketing, IT, innovation and technology, business services and legal services.

Services needed to maintain production and business services including installation and repairs on machinery, maintenance of office equipment and purchases of office materials, as well as through sales of Pivara Skopje's products.

Local sourcing of raw materials such as sugar and broken rice.

THE IMPACTS ARE

TELIMIED TO.

Main sectors affected by Pivara Skopje in MN €









4.7 MN €



2.5 MN €



4.6 MN €



252 JOBS



184 JOBS



418 JOBS



1.7 MN €



1.0 MN €



1.2 MN €

Professional services

Retail

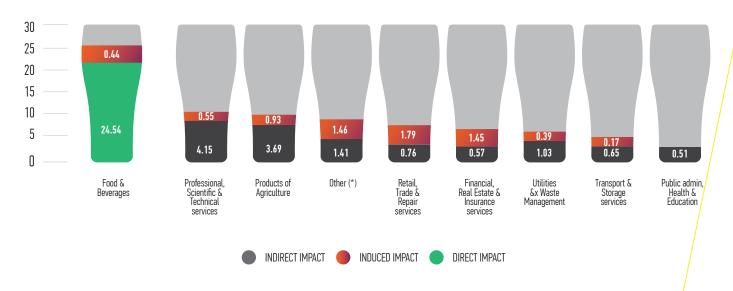
Agriculture

Source: Deloitte's own calculations based on data provided by Pivara Skopje and the Input-Output Model of Macedonian economy.

DETAILED FINDINGS

IMPACT ON VALUE ADDED: 44.6 MN €

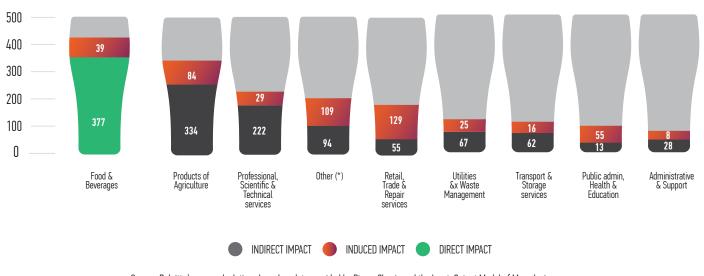
Total gross value added created in Macedonia through Pivara Skopje's activity in 2016, broken down by sector and type of impact (in MN €).



Source: Deloitte's own calculations based on data provided by Pivara Skopje and the Input-Output Model of Macedonian economy.

IMPACT ON EMPLOYMENT: 1,747 JOBS

Total employment supported in Macedonia through Pivara Skopje's activity in 2016, broken down by sector and type of effect (in persons).

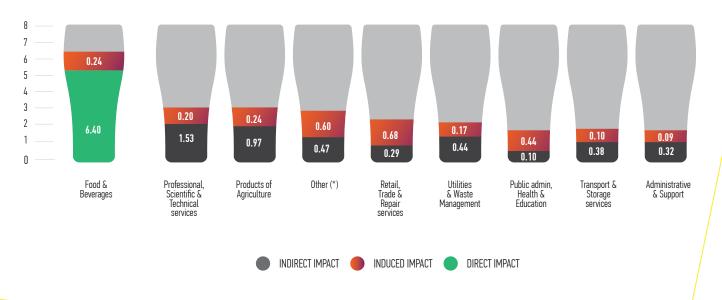


Source: Deloitte's own calculations based on data provided by Pivara Skopje and the Input-Output Model of Macedonian economy.

DETAILED FINDINGS

TOTAL INCOME: 13.7 MN €

Total income created in Macedonia through Pivara Skopje's activity in 2016, broken down by sector and type of effect (in MN ϵ).



Source: Deloitte`s own calculations based on data provided by Pivara Skopje and the Input-Output Model of Macedonian economy.

SCENARIO ANALYSIS

A scenario in which a producer does not make efforts to purchase materials and services from domestic suppliers would mean an economic outcome which significantly reduces the value added domestically. Part of Pivara Skopje's production materials need to be imported, but how would the impact look if a producer with Pivara Skopje's profile used only imported materials and services?

In such a case the losses to gross value added for the economy would be 15.5 MN €, and the labor market would suffer a loss of 1,078 jobs*.

Most affected sectors include:

PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES

GVA loss: 4.4 MN € Job loss: 234 jobs Income loss: 1.6 MN €

PRODUCTS OF AGRICULTURE

GVA loss: 4.1 MN € Job loss: 368 jobs Income loss: 1.1 MN €

RETAIL, TRADE AND REPAIR SERVICES

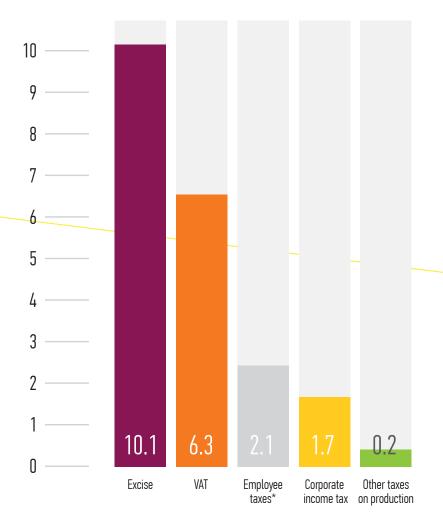
GVA loss: 1.5 MN € Job loss: 108 jobs Income loss: 0.6 MN €



TAX CONTRIBUTIONSTO THE STATE

Pivara Skopje has a high volume of production and a large market share of customers which produces great revenues for both Pivara Skopje and also the State of Macedonia.

The total tax contribution of Pivara Skopje in 2016 consisting of excise taxes, VAT, employee taxes, corporate income tax, and other production taxes is 21.1 MN €. The excise and VAT taxes are indirect taxes which account for over 17.1 MN € while direct taxes paid by Pivara Skopje and the employees of Pivara Skopje amount to 4 MN €.



Source: Deloitte's own calculations based on data provided by Pivara Skopje



SETTING THE BAR HIGH

Pivara Skopje is committed to contribute to a better and sustainable future. Sustainability has been fundamental to Pivara Skopje since 1922 and it lies at the heart of everything it does.

Building community trust through the responsible and sustainable management of Pivara Skopje business is an essential part of our culture.

Pivara Skopje will continue to invest significantly in order to create shared value with its employees, community, customers, consumers and shareholders, setting ambitious long-term sustainability targets and reporting on the progress.

The impact on the community is set to support and improve the quality of life of all members.

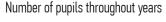
HEALTH & SAFETY

Pivara Skopje is a pioneer in the country in the area of Health and Safety and an example of excellent practice in the domestic beverage industry. The company is among the first in 2007 to introduce and get certified by the leading International standard for management of occupational safety and health – OHSAS 18001. To maintain a healthy and safe work environment, Pivara Skopje organizes various activities, trainings, presentations and drills throughout the year through which all employees acquire and update their knowledge on this important segment.

PIVARA SKOPJE VOLUNTEERS EDUCATED ALMOST EVERY FOURTH GRADER ABOUT H&S IN SCHOOLS

For four consecutive years, Pivara Skopje, in cooperation with the municipalities and elementary schools, implements an educational project on topics related to health and safety intended for fourth grade pupils. The project is implemented through interactive and graphic presentations tailored to the pupils' age through which they, in the presence of their teachers, get tips on how to properly keep the body posture while sitting in the school bench and working on a computer, how to properly carry the school bag, how to prevent injuries caused by slipping, tripping and falling, and how to act in case of fire in school.

18,500	Pupils / 4 years
16	Municipalities
114	Schools
63	Pivara Skopje volunteers
167	Volunteers hours





*executed during making of the brochure 100% of four graders in the country



YOUTH EMPOWERED

19 YÉARS HERITAGE IN EDUCATING STUDENTS & 1 YEAR FREE OF CHARGE ROLL OF TRAINING PROGRAM

The Educational Center of Pivara Skopje exists for 19 years now. It was primarily developed for educating the employees while later becomes one of the most reputable Educational Center in the country for young people.

Aiming to support the measures and efforts of the state competent institutions and the Government to further reduce unemployment, especially among young people, in 2016 Pivara Skopje launched "Skills for success" program giving preferences to the young people coming from the socially vulnerable categories. Pivara Skopje covers the overall costs of the participants' training thus making the training entirely free of charge for all participants. In addition to the managers from Pivara Skopje, other leading representatives of the business, experts from universities, public institutions, as well as respectable international organizations are involved as lecturers in the trainings. Since 1997 4,300 students passed through Pivara Skopje Educational Center.

IMPACT STATISTICS TOTAL PARTICIPANTS Promoting gender equality and 2/3 of participants women entrepreneurs are women 2020 Encouraging an 4% of participants 2019 entrepreneurial spirit started own business 2018 Reducing the unemployment 33% of unemployed participants 1,675 rate of youth found jobs in 12 months 1,117 2017 96% Positive attitude towards the program 447 Total participants until today 4,300 * All costs covered by Pivara Skopje participants





COMMUNITY WELL-BEING

For 6 years Pivara Skopje inspires and engages people on active lifestyle, starting from the Coca-Cola Cup to the donation of the Coca-Cola Active Zones through the country, implemented for the first time in 2016, both in cooperation with the local government and the International NGO "Open fun football schools".

The Coca-Cola Active Zones are a long-term project for providing recreational and sports open air active zones, equipped with most sophisticated fitness equipment, available to all citizens 24/7 free of charge. The goal of this project is to encourage people on practicing physical, sport and recreational activities while having fun and socializing. So far, Coca-Cola Active Zones were donated in 10 municipalities throughout the country.

The latest project of Pivara Skopje, donation of bicycle parking stations is a contribution in promoting recreational and urban biking as a lifestyle and raising awareness about the use of bicycles as the most energy-efficient urban transport, which has high potential in reducing air pollution and in protecting the environment.

Coca-Cola football cup

over 6,000 Boys and girls 12-16 yo "moved" so far

over 200 Games played

18 Municipalities involved

over 150 Different schools engaged

Biking stations

5 Biking stations opened

55,000 People benefited throughout the country





Coca-Cola active zones

10 Active zones opened

6,000 People benefited throughout the country





WATER & ENVIRONMENT

Minimizing the impact on the environment is one of the core targets of Pivara Skopje. Pivara Skopje is continually seeking new ways to decrease water and energy consumption and to reduce waste. All the efforts resulted in receiving an A-integrated environmental permit A from the Ministry of Environment and Physical Planning which confirms that Pivara Skopje in all segments of its operations applies the Mighest standards of environmental protection. Over the years extensive investments have been made, worth over 3 MN € to fulfill all the conditions and criteria laid down in the Operational Plan for obtaining the license.

Pivara Skopje is one of the initiators and founders of the first recovery organization for packaging waste management in the country, "Pakomak" Together with Pakomak, Pivara Skopje constantly conducts environmental actions for raising awareness on environmental protection, thus supporting its recovery organization in achieving national targets for packaging waste and contributing toward healthy and clean environment

UNDER THE MOTTO "ARE YOU RECYCLING!?"

- Two years in a row, voluntarily, employees and management of Pivara Skopje, together with the Embassy of the Netherlands in Macedonia, British Embassy and the company Pakomak, organizes actions for collecting packaging waste from public areas such as the river Vardar coast and the Lake Matka. Within the actions, the entire dry waste is collected, properly selected and send to recycling.
- Together with the Embassy of the Netherlands in Macedonia and the companies Pakomak and Zero Waste, Pivara Skopje is conducting a project for educating children from their youngest age about the methods and the benefits of recycling and proper waste treatment. The project is implemented through an innovative and entertaining theater play titled "Green Planet" intended for children from first to fifth grade. So far, through 12 theater plays, set in 8 cities throughout the country, 8,420 children have been educated on importance of keeping our environment healthy and clean.



OWN WASTE WATER TREATMENT PLANT

One of the most cutting- edge investments of Pivara Skopje is the Waste Water Treatment Plant - one of its kind in the country. The plant treats water from the manufacturing process with biological means only and represents a high-tech innovation applied for the first time by the in-country industry. This state-of-the-art technology enables treatment of water from the manufacturing process to be later re-used as industrial water, while gas emissions released during water treatment are used for energy generation.



NATIONAL RECOGNITION FOR ENVIRONMENT FOR WATER WASTE TREATMENT

National coordinating body for CSR. Awarding program co-financed by the European Union and implemented by The Ministry of Economy

DISASTER RELIEF

basis

One of the main strategic commitments of Pivara Skopje is providing help to those who are most in need. Based on the long-term close cooperation established with the Macedonian Red Cross, this has been confirmed on many occasions through aid and logistics in many humanitarian activities, cases of natural disasters and accidents.

In August 2016, the nature has once again unleashed all its power making devastating floods with tragic consequences in Skopje. By donating monetary funds, drinking water and volunteer help, Pivara Skopje and The Coca-Cola Company supported the Red Cross organization, the Municipality of Gazi Baba and other relevant institutions in relieving the consequences of this natural disaster.



70 Employees 210 32 t. of water 100,000 euros

Helping on voluntary Voluntary hours Donated Donated

MODERATE ALCOHOL CONSUMPTION

Pivara Skopje believes that only responsible consumption can provide genuine enjoyment of beer. Excessive drinking does not mean success to its business and does not contribute to the sustainable growth of society. So, in order to raise awareness about responsible drinking and reduce the harmful use of alcohol, a platform for moderate alcohol consumption has been developed and constantly upgraded. As the largest producer of beer in the country, Pivara Skopje has a long-term commitment to spread the culture of responsible consumption and embed the values of responsible drinking into the everyday living of the community it belongs to.

In order to spread the culture of responsible consumption, Pivara Skopje, in addition to all its employees, associates and partners, included many successful public figures who, with their conduct and personal messages serve as an example for other citizens, especially young people. This group of Ambassadors of responsible drinking of Pivara Skopje among others also includes a large number of endorsers, such as the members of the Macedonian national handball team, lovers of motorcycles and the motorcycle culture including the President of the national motorcycle club, international car racer champion and the world famous speleological diver who, talking about personal experiences recommend responsible drinking. Pivara Skopje actively and continuously collaborates with all relevant institutions and NGOs in the realization of activities which are part of the process of spreading the culture of moderate alcohol consumption.

WOMAN EMPOWERMENT

Woman empowerment is one of the strategic determinations of Pivara Skopje. In Pivara Skopje it is strongly believed that empowering women to fully participate in the economy is essential for prosperity, development and sustainability, and that it can improve the quality of the economy, life and the community as a whole. Pivara Skopje has clear goals and strategy for market success and overall community engagement, at the same time being deeply involved in developing a sense of employees' diversity and fairness in all aspects of the company operations, giving equal opportunities to all for learning, development, promotion and contribution to the business and community.



GLASS FULL

Glass Full is the first and one of its kind corporate publishing platform in the country. It was launched on January 1st 2016 and instantly became recognizable by its consistency and carefully selected content that integrates interviews and articles from the employees, partners and external content contributors. Glass Full amplifies stories about responsible alcohol consumption, youth empowerment, woman empowerment, active life-style, health and safety, community wellbeing and water and environment protection thus reflecting Pivara Skopje corporate identity.



SUSTAINABLITY TARGETS

Thanks to recent initiatives, Pivara Skopje significantly contributes to total investments and achievements of Coca-Cola HBC in the sustainable development, among which are:

Direct and indirect reduction of carbon dioxide emissions by



per year

Investment of

5.8

MN € in installations that allow savings of

1.1

MN cubic meters of water

4.3

MN € invested in energy efficiency projects.

PIVARA SKOPJE IS A LONG TERM SPONSOR OF:

35 YEARS

MACEDONIAN HANDBALL FEDERATION 43 YEARS

GALICHNIK WEDDING 27 YEARS

OHRID SUMMER FESTIVAL







ANNUALY PIVARA SKOPJE SUPPORTS:

26

EDUCATIVE EVENTS

16

SPORT EVENTS 15

HUMANITARIAN EVENTS 27

CULTURAL EVENTS



ECONOMIC IMPACT







JOB IN THE SYSTEM SUPPORTS



3.6 OTHER JOBS IN MACEDONIA

CONCLUSIONS

In today's competitive world economy it is becoming increasingly important to maximize local economic impacts and support jobs.

Pivara Skopje generates

44.6 MN €

gross value added in Macedonia.

About

5,980 PEOPLE

partly or wholly dependent on the income generated by Pivara Skopje. This value creates a ripple effect across the economy which supports

1,747 **JOBS**

over four times the direct employment of the company.

Most of the jobs supported
through Pivara Skopje's operations
are in vital sectors of the economy such
as Agriculture and Retail, Trade, and Repair
services. Jobs in these sectors and others are
important, because many local families rely on
income earned locally - nearly

13.7 MN €

in income can be attributed to the presence of Pivara Skopje in Macedonia.

About

21.1 MN €

is paid in taxes through the production and sales of Pivara Skopje's products. This equals to 12% of the total corporate income taxes collected by the government in 2016. The local impact of
Pivara Skopje can be calculated
and estimated, but the impact of
local communities on Pivara Skopje
cannot Without local support of
communities Pivara Skopje could not
operate, which is why we sincerely thank
each of our suppliers and every last
customer for having an impact on
our impact.

The study "Socio- economic impact of Pivara Skopje" is available online: www.polnacasa.mk



