

CARBON FOOTPRINT MAPPING PROJECT

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In 2022, we completed our Carbon Footprint Mapping project and took an important step to identify the areas where we have the highest emission impact on our value chain. Although we have completed the basic steps of our project, we continue to work on data improvement, necessary scope expansions and moving the calculation to digital platforms. Through this project, in addition to our Scope 1 and 2 emissions from our operations, we have taken a holistic approach

The aim of this project is to:

- prepare source streaming maps of entire Anadolu Efes value chain,
- describe methodologies and set boundaries for calculation of Anadolu Efes 2020-2021 Scope 1, 2 and 3 emissions,
- prepare a customize dashboard for Anadolu Efes to follow up the sustainability data in a systematically way and
- ensure a GHG management manual and decision log to keep the memory behind calculations.
- develop a methodolgy to continuously monitör GHG emmissions.

by including our Scope 3 emissions, reflecting our carbon emission impact across our entire value chain. We will assess our GHG inventory on a regular basis. 2022 was the first year of continuous monitoring.

We have analyzed all our breweries, malt and hop plants, head offices, sales offices, and warehouses in Anadolu Efes Group countries.¹ Within the scope of this project, we performed detailed calculations in our Turkey, Georgia, Moldova and Kazakhstan operations and organisations. In our ABIn Bev Efes operations, we proceeded by applying the established calculation methodology of this entity in previous years. For Scope 3 emmissions ABIn Bev Efes operations have not yet been included in this project as the calculation methodology differs. We continue our Scope 3 consolidation studies for these operations in the coming years.

Throughout the project, we use the GHG Protocol Corporate Accounting and Reporting Standard and GHG Protocol Corporate Value Chain Standard (Scope 3) and Technical Guidance for Calculating Scope 3 Emissions Reporting Standard as guides. Additionally, sector guides are used such as Beverage Industry Greenhouse Gas (GHG) Emissions Sector Guidance.

Become net zero in all our operations by 2030

• Base year is chosen as 2020 to compare improvement by years to reach our Net Zero target.

As a result of our carbon mapping analysis, we obtained the breakdown of our scope 1 and 2 emissions for 2021 and 2022. Our Scope 1 and Scope 2 emissions have been reduced to a total of 353,689 tons of CO_2 eq. While we have achieved a 25% reduction in Scope 2 emissions, we have managed to reduce our Scope 1 emissions by 1%. We conduct detailed analysis of our emissions both per production volume and per country and facility. Based on the results of these analyses, we can focus our emission reduction projects more efficiently.

1 The operational control approach is chosen while determining organizational boundaries to consolidate GHG emissions. Entities which are defined as companies that the Anadolu Efes directly or indirectly owns are included.

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Greenhouse Gas Emissions (ton CO₂eq)



When analyzing our Scope 3 emissions, we have taken into account the nine different categories (purchased goods & services, capital goods, transportation & logistics, waste generation, business travel, employee commuting, processing of sold products, use of coolers and franchising)² in our value chain. Excluded categories represent approximately less than 10% of total Scope 3 emissions. We as Anadolu Efes recently started measuring our Scope 3 emissions where some of our scopes excluded. Our scope will be expanded and the methodologies we use will be improved in future reporting. By setting appropriate limits based on the characteristics of our operations and value chain structure, we were able to obtain detailed insights into our environmental impact in terms of greenhouse gas emissions. To achieve our net zero emission target across all our operations, we have identified the most carbon-intensive steps in our value chain through a scientificallybased calculation method. In addition, we continue to review and improve our Scope 3 methodology. For example, in 2022, we include upstream transportation into our transportation and logistics category.

Greenhouse Gas Emissions by Country (%)



Categories included in our Scope 3 emissions:

- Purchased Goods and Services
- Capital Goods
- Coolers
- Business Travel
- Employee Commuting

- Waste Generation
- Transportation and Logistics
- Processing of Sold Product
- Franchises

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Scope 3 - Categories	2020	2021	2022
Purchased Goods and Services	295.769,19	384.882,50	427.856,97
Capital Goods	33.399,08	69.888,84	35.085,28
Coolers	14.365,16	15.370,90	17.184,68
Business Travel	167,59	260,72	675,69
Employee Commuting	605,26	596,98	630,51
Waste Generation	-6.852,60	-7.230,30	-2.771,46
Upstream Transportation	-	-	19.197,55
Downstream Transportation & Storage	56.518,22	61.494,86	81.832,56
Processing of Sold Product	0,00	76,30	-
Franchises	162,66	219,81	361,27
Total ³	394.134,55	525.560,62	580.053,06

Bringing all this information together, we mapped our carbon emissions along our value chain. By evaluating our Scope 1, Scope 2 and Scope 3 emissions in the relevant categories, we identified at which steps our impact is the highest. While we examine our carbon footprint map along the value chain, the areas with the highest carbon emissions were packaging, agriculture and purchased goods, beer production, coolers, transportation and logistics.

Our Carbon Footprint Map along the Value Chain

This ranking remained similar when we examined the carbon intensity of our value chain per hl beer produced. Since we completed the calculations for 2022 Scope 3 data after the period when we published our integrated report, there are minor differences in our value chain emission distribution. The most important reason for the difference is the addition of upstream transportation data to the transportation & logistics section in our Scope 3 emissions for 2022.



3 These emissions exclude ABIn Bev Efes operations. Approximately 15% of Scope 3 emission factor data is primary data and data provided by suppliers. We aim that supporting data, set measurement standards & methodology and the level of data granularity will be improved by time.

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Value Chain Steps - Absolute Emission (ton CO2e)	2021	2022
Agriculture & Purchased Goods	167.209,19	187.472,54
Processing of Brewing Ingredients	22.582,91	24.068,03
Packaging	217.673,31	240.384,43
Operations	103.657,26	118.690,41
Transportation & Logistics	61.494,86	101.030,11
Capital Goods & Coolers	85.259,75	52.269,96
Other Scope 3 Categories	1.153,82	1.667,48
Total ³	659.031,09	725.582,96

As a result of this analysis, we are able to prioritize our greenhouse gas emission reduction projects and focus on innovative and untested efforts, in addition to conventional mitigation projects, to achieve our net zero goals. Our carbon footprint mapping study has highlighted the significant impact of packaging on our emissions, and we are intensifying our efforts in this area. In addition, as part of this project, we are systematically transitioning our data to a software platform to track all metrics related to our greenhouse gas emissions. This mapping and systematic data tracking will help us utilize our resources effectively to achieve our carbon zero goal in our operations by 2030, continue our planned and gradual emission reduction efforts.

We will continue to review & develop GHG emissions calculation methodology in line with new methodologies, availability of better data sources and alignment with industry best practice. We will target to increasingly use actual performance data provided by our suppliers rather than literature data / secondary data.

You may find more about our ambition to achieve net zero in our 2022 Integrated Report.

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