The Beverage Industry's Climate Initiative 2020

Report – Climate impact 2020



This is the beverage industry's third climate report. As was the case last year, the report has been prepared under the pressure of a prevailing global pandemic. Despite these challenges, the number of participants in the Beverage Industry's Climate Initiative has grown and progress has been made. We are on the way to reaching our goal and find strength in the belief that collaboration is the key to success.

When the pandemic first broke out in the spring of 2020, many of us wondered how this would affect the implementation of climate related measures at corporate level and society in general. There was a concern that the challenges of COVID would overshadow climate issues and that the economic consequences would force a rapid recovery without regard to previous sustainability goals. However, although the long-term consequences are still unknown, companies and decision-makers in Sweden, the EU and globally are all talking about a green restart. This includes participants in the Beverage Industry's Climate Initiative. Through our joint Initiative, we want to inspire and encourage each other to continue to keep sustainability high on the agenda.

The results presented in this year's report show that steps are being made in the right direction. Our climate impact per litre of beverage is low and has fallen since the first reporting for the 2018 financial year. Investments in fossilfree energy fuels, climate-smarter packaging and more efficient transportation lie behind this fall. Despite this, there is still a lot that needs to be done and participants in the Beverage Industry's Climate Initiative have set both individual and common goals to achieve our vision of a beverage industry without impact on the climate, where every drop counts!

All participants in the Beverage Industry's Climate Initiative, August 2021.

The Beverage Industry's **Climate Initiative**

The Initiative was formed by the Swedish Spirits & Wine Suppliers Association, the Swedish Brewers Association and Systembolaget with the vision of "A beverage industry without impact on the climate, where every drop counts". Colleagues in the industry work both individually and together to reduce their climate impact. The originators have developed a reporting tool that allows both large and small operators to participate. Every supplier of Systembolaget can join the Initiative.

The long-term goal is for the industry to be climate neutral¹ by 2045. The first survey conducted in 2019 concerned the 2018 financial year. Today, the Initiative has 51 participants² who together account for almost 84% of the beverage volume in Systembolaget's Set Range.

¹⁻ Climate neutrality means that the total climate impact from a certain activity or product are equal to net-zero. All emissions are counted - from production, packaging, transport, travel and supply chain emissions. 2- These 57 participants report through 45 licenses as some belong to larger company groups.

Goals of the Beverage Industry's **Climate Initiative leading up to 2030**

2020 was an earth-shattering year due to the pandemic, with major challenges throughout the supply chain from cultivation, production, logistics to sales and right up to the end customer. Despite the strained situation, work on the climate challenge has not stopped. The Beverage Industry's Climate Initiative has gained a number of new participants and the companies have also taken individual initiatives to reduce their own climate impact. Together, the participants have also formulated and adopted shared goals for the Initiative. The goals will contribute to driving work on continuous improvements for a climate neutral beverage industry by 2045.

Working in collaboration, the Initiative has set four overall goals up to 2030:

100% resource-efficient and fossil-free domestic transportation and an increasing proportion of fossil-free transportation abroad.



recyclable packaging materials.



100% renewable electricity and energy in the operations companies carry out themselves as well as an increasing share across the entire supply chain.

A strategy for measurable primary production and cultivation.

The participants also set individual goals tailored to their own business operations.

The goals are ambitious and to achieve them we need:

1. Political decisions that ensure continuous investment in sustainability and promote innovation and investment in the long term.

2. Increased investments at societal level in infrastructure and fossil-free transportation.

3. A well-functioning packaging collection and recycling system that ensures access to recycled material of good quality.

4. Access to renewable and environmentally friendly energy.

4

Magdalena Gerger, CEO of Systembolaget

This is a unique branch initiative. My hope is that in the long term we can show many good and innovative examples of what we do and thus inspire other industries. Emil Sallnäs, chairman of the Liquor & Wine Suppliers Association

Our members are already making great efforts to reduce their climate impact, but through a joint commitment we can drive and support each other further. We are both proud and humbled by the work that now lies ahead of us.

Mikael Hellberg, chairman of Sveriges Bryggerier

The expression of will summarizes the direction for our joint continued work to reduce our climate footprint, integrate sustainability into our business strategies and create space for greater responsibility in our business models. It is unique that the branch comes together and collaborates in this way.

Method and system boundaries

The climate accounting undertaken within the Beverage Industry's Climate Initiative has been carried out in accordance with the Greenhouse Gas (GHG) Protocol, a globally recognised standard for accounting and reporting greenhouse gas emissions. Under the GHG protocol's methodology, emissions are reported in three different categories (known as Scopes):

Scope 1:

Scope 2:

direct GHG emissions occurring from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles etc.

indirect GHG emissions from the generation of purchased electricity and heating consumed by the company.

Scope 3: other indirect GHG emissions related to the activities of the company, both upstream and downstream (e.g. production of purchased packaging).

An operational control approach has been used for the accounting. This means that all emissions from an activity under operational control of the accounting company must be categorised as the company's direct emissions and placed under Scopes 1 or 2. A market-based method has been applied when accounting for the climate impact from energy use. According to the market-based methodology, emissions linked to energy are accounted on the basis of which source the energy comes from (e.g. wind or hydro-electric power). A so-called residual mix is applied to energy that is unspecified³. All emissions are measured in carbon dioxide equivalents (CO2e) in order to take the total climate impact, and not just the impact arising from carbon dioxide emissions, into account. For example, methane is a 28 times more potent greenhouse gas than carbon dioxide (hence 1 kg of methane corresponds to 28 kg CO2e).

Within the Beverage Industry's Climate Initiative, all emissions within Scopes 1 and 2 are measured while certain delimitations apply to emissions in Scope 3. The chosen system delimitations in Scope 3 mean that emissions from purchased transport⁴,

4- Limited to roads, trains, ships and planes.

business travel, production and distribution of energy and fuel-related activities, production of packaging and waste management within the own operations of companies are measured. Thus, parts of the indirect climate impact of companies are excluded from the Beverage Industry's Climate Initiative's reporting. One example of this concerns emissions from the cultivation of raw materials used in production and the manufacture of beverages that takes place through a third party. Systembolaget – who are themselves a reporter within the Initiative – have reported their emissions to the same extent as other participants, with some exceptions. In this report, as well as previous reports, Systembolaget's emissions are excluded. Our ambition is to include Systembolaget in future to the extent described above.

Our working method

During the spring of 2021, participants in the Beverage Industry's Climate Initiative reported data for the 2020 financial year as described above. Company-specific data on energy use, business travel, freight transport, used packaging materials, waste as well as, in some cases, manufactured or imported beverages, have been reported for each respective participant in a web-based tool. No account has been made of emissions that occur outside the boundary of the system as it has been defined. Based on the reported data, the tool has then calculated the climate impact of each company. The data reported by each individual company was reviewed to ensure its quality, after which the companies were given the chance to respond to any comments.



Participants in the Initiative can choose to report either activity data or an emissions figure for items inputted. For example, with regard to the use of glass packaging, participants can choose to report in kg of glass (activity data) or as CO2e for glass production (emissions figure). Graphs and results presenting emissions include all emissions, regardless of whether activity data or an emissions figure was reported. On the other hand, reported emissions figures were not converted to activity data and are therefore not included in the graphs and results that show activity data. This means that if 100 ton CO2e has been reported as an emissions figure for glass packaging, the weight of this packaging will not be included in the compilation of packaging weights.

³⁻ The residual mix is the environmental value that remains after deducting electricity sold with guaranteed origin

Results for 2020

This is the third report from the Beverage Industry's Climate Initiative. The results presented on the following pages are based on company-specific data reported via the tool. The results are compared to those from the previous year. Note that the number of companies reporting data to the Initiative varies year by year. This should be borne in mind when comparing the results with the previous year further details are available under the heading Data quality and reporting.

Key figures

Key figures have been produced for the Initiative in order to obtain an overview of how the emissions relate to business activities. These key figures are based on final total reported company emissions divided by a total denominator, such as, for example, the total amount of beverage sold.

The key figures are presented for all companies together as well as distributed between breweries and importers. This is because of general differences in the business operations carried out by breweries and importers, which is reflected in the key figures. Breweries include producers of beer, cider and other brewery products manufactured in Sweden. Importers includes companies that buy wine, spirits and beer from different parts of the world and import them into Sweden.

The key figures are presented in the following tables and graphs.

| Nyckeltal | Bryggerier | Importörer av vin, sprit och öl | Totalt |
|---|------------|------------------------------------|--------|
| Utsläpp per total mängd såld dryck, kg CO2e/liter | 0,14 | 0,36 | 0,19 |
| Utsläpp per omsättning, kg CO2e/tSEK | 11,1 | 6,4 | 8,5 |
| Utsläpp per FTE, ton CO2e/ FTE | 62,4 | 89,5 | 71,8 |
| Utsläpp från transporter (cargo) per liter dryck, kg CO2e/liter | 0,013 | 0,086 | 0,03 |
| Utsläpp från förpackningar per liter dryck, kg CO2e/liter | 0,119 | 0,217 | 0,142 |

Emissions per FTE



Emissions per turnover





For all participants (breweries and importers), emissions per litre of beverage sold is 0.19 kg CO2e. This represents a decrease compared with the previous year (0.21 kg CO2e).

To provide some perspective, these figures can, for example, be compared to oat milk or bottled water where the corresponding key figures are 0.14 kg CO2e/litre⁵ and 0.17 kg CO2e/litre, respectively⁶. Note that this is for an extent corresponding to reporting under the Beverage Industry's Climate Initiative, i.e. including emissions generated during heating and electricity consumption in manufacture, transport and packaging. For further perspective, the key figure can be compared with driving a car, where the emissions from 1 litre of beverage correspond to the emissions from approximately 1.6 km of driving in a normal petrol car⁷.

Emissions from different Scopes

The 51 companies reported total emissions of 250,320 tonnes CO2e, which corresponds to about 0.5% of Sweden's territorial emissions during 2019⁸. The majority of emissions fall under Scope 3 (91%), with lesser proportions in Scope 1 (3%) and Scope 2 (6%). Packaging and freight transport account for the bulk of emissions in Scope 3 (81% and 17%, respectively). The relatively small emissions in Scope 1 mainly relate to the use of energy fuel during brewery production as well as refrigerant leakage. The emissions in Scope 2 come mainly from electricity consumption and heating in manufacturing facilities and offices. See the following graphs for the distribution of emissions by scope and by category (for Scope 3).

Distribution of emissions by Scope



5- Oatly, Sustainability Report 2018

6- Swedish Brewers Association, Brief facts about bottled water and the environment (2009)

7- Swedish Transport Administration, the climate barometer

8- Swedish Environmental Protection Agency, Territorial emissions and removals of greenhouse gases (2019)

Distribution of emissions by category, Scope 3



51 Companies providing a final report

250,320 tonne CO2e – Total reported emissions

166,422,977 kWh - Total electricity consumption of which 69% renewable electricity

175,188 tonne – Material weight in packaging of which 82% glass and aluminium (of total packaging weight) and 60% recycled raw material (of total packaging weight)

572.6 million tonne-kilometres - Total reported transportation (both inbound and outbound)

Kg CO2e per litre beverage sold: Breweries: 0.143 Importers: 0.363 Total: 0.194

84% of the volume in Systembolaget's Set Range

Emissions by breweries and importers

Distribution of emissions by Scope, Breweries

The way in which emissions are distributed between different Scopes usually differs between breweries and importers as their operations tend not to be the same. Although both operations have the majority of their emissions in Scope 3 (96% for breweries and 84% for importers), for breweries the remaining emissions are mainly found in Scope 1 while the opposite is true for importers (emissions mainly found in Scope 2). The Scope 1 emissions by breweries are mainly related to the use of energy fuels in production while Scope 2 emissions by importers mainly occur in connection with electricity consumption and heating of premises. See the following graphs for the emissions distribution for breweries and importers.

5610 4% 4% 5000 5000 1, tonne CO2e 5000 2, tonne CO2e 5000 3, tonne CO2e 5000 3, tonne CO2e

Distribution of emissions by Scope, Importers of wine, spirits and beer



Distribution of emissions by category

Within the boundary of the system as it has been defined, the majority of emissions from both breweries and importers come from the production of packaging. Emissions distribution between the two types of business operation differs somewhat in other respects. Importers have a higher proportion of emissions from freight transport and electricity consumption as purchased beverages are transported longer distances. Electricity consumption and heating of premises constitutes the third largest emissions category for importers. For breweries, energy fuels are highly significant as well as heating and cooling, which can be attributed to energy-intensive production. Freight transport is also a notable source of emissions for breweries. See the following graphs for emissions distribution by category for breweries and importers.

Distribution of emissions by category: Breweries





Distribution of emissions by category: Importers of wine, spirits and





Packaging

Although packaging accounts for the majority of the reported emissions, it is important to remember that packaging is currently a necessity for the business operations of both breweries and importers. Of the various materials used, glass, aluminium and plastic account for the largest share, both in terms of total weight and emissions. Many of the participants in the Beverage Industry's Climate Initiative work actively to reduce emissions from packaging materials, among other things by increasing the proportion of recycled raw materials in packaging. For the reporting year, the share of recycled raw materials was 59% of total packaging materials in the Initiative. The corresponding shares for the two previous years were 62% (2019) and 56% (2018), respectively. It should also be noted that the proportion of recycled raw material differs between the different material types (see graph below)

Material weight





Freight transport

Freight transport is the emission category with the greatest climate impact apart from packaging materials. In total, freight transport for 2020 corresponded to approximately 570 million tonne-kilometres, divided between road, ship, train and air transportation. Ship, train and air transportation mainly relate to the import of beverages, while breweries mostly use road transportation. Note that the above-mentioned figure only includes reported activity data, which means that the total figure for tonne-kilometres cannot be equated with the total emissions figure for freight transport. However, the utilisation and thus the distribution between the differen

modes of transport is considered representative of the entire Initiative and is presented in the pie chart below.

The results show that the largest amount of transportation takes place by ship, while road transport accounts for the highest emissions. This is because emissions per tonne-kilometre transported are higher for transport by road than by ship. In comparison with the previous year, emissions from road and ship transport have decreased slightly, while emissions related to transport by train and air have risen.

Transportation, proportion tonne-km



Emissions from transportation



Conclusions

Outcome

The climate issue is high on the agenda for participants in the Beverage Industry's Climate Initiative and, despite the ongoing pandemic, the 2020 financial year saw considerable activity within the Initiative. The climate focus is evident from the reporting, where emissions from own company business operations (Scope 1 and Scope 2) are both low and have decreased since the previous year. As in the previous year, the majority of emissions are from suppliers and subcontractors in the participants' value chain (Scope 3), where packaging materials and freight transport constitute the largest emissions categories. Participants in the Beverage Industry's Climate Initiative work actively with these two particular categories and goals were set in 2020 to, among other things, reduce their climate impact.

The reduction in emissions from own company business operations is mainly attributable to reduced emissions from energy fuels in Scope 1. This is due to the fact that a number of breweries have rearranged their operations and now use less fossil fuels and more biofuels and electricity in their manufacturing. This change means less emissions are generated in Scope 1 and has also affected the distribution between scopes for breweries, where 91% is now found in Scope 3. This latter figure can be compared with the previous year when about 70% of emissions were found in Scope 3. With regard to the proportion of renewable electricity (which affects Scope 2), year on year figures are unchanged.

As in previous years, the two largest emissions categories are found in Scope 3: packaging materials and freight transport. With regard to packaging materials, the total emissions have increased slightly in comparison with the previous year, from about 174 kilotons CO2e (2019) to 183 kilotons CO2e (2020). This increase has taken place despite a reduced material weight being reported. The results reveal that this may be due to the fact that the proportion of recycled raw materials has fallen somewhat. This applies to the majority of material types, with the greatest reductions for aluminium and steel. It is also worth noting that more companies have reported data this year, and that the data becomes more accurate the more information is available. This should be borne in mind when interpreting the results – further details are available under the heading Data quality and reporting.

In terms of freight transport (the second largest emission category), ship freight is the main means of transport in terms of number of tonne-kilometres transported, while road transport accounts for the highest emissions. This is in line with previous years.

As expected, COVID-19 has had some impact on results, mainly as regards business travel – emissions from which are significantly lower this year due to restrictions and less travel. This applies to both breweries and importers. It is difficult to determine what other changes are due to the pandemic, as certain changes in consumption patterns could have affected the year's results. Systembolaget has experienced an increased demand for premium products which is partly believed to be a consequence of a drop in the number of restaurant visits during the pandemic. Premium products generally use more emission-intensive packaging, which could be a further explanation for this year's increased emissions in the category. However, this is speculative and needs to be corroborated by further data collection and analysis; the actual impact of the pandemic on the results is a topic that will need to be followed up in the coming years.

The reductions that have taken place this year have also affected the key figures of emissions per total quantity of beverage sold, emissions per turnover and emissions per FTE (Full-time equivalent) – all three of which have fallen slightly. On average, we see that emissions per litre of beverage and per FTE are higher for importers, while emissions per turnover are higher for breweries. The reductions that are reflected in the key figures have taken place despite the fact that the total sales volume has risen. One driving factor behind this, is the active work to reduce climate impact that participants in the Initiative engage in. However, it should also be noted that year on year variation in the number of participating reporters (and their specific identity) also influences this comparison.

The key figures emissions from transport per litre of beverage and emissions from packaging per litre of beverage were new to the previous annual report. These key figures are not affected by decreases in items such as less business travel or reduced emissions from energy fuels, but rather only relate to transportation and packaging. The key figure related to transport has decreased, but only marginally, compared with the previous year, while the key figure related to packaging has instead increased slightly (see the reasoning above).

Data quality and reporting

In previous years, reporting focused on the data that the companies had available. The same focus also applies for the current year and companies have had the opportunity to omit data that has not been available. However, such omissions were relatively minor and are not considered to have had a significant impact on the results.

Participation differs somewhat from the previous year, which means that results for the different years are presented on a different basis. Both the number of participants and the specific companies that have chosen to participate vary. Even allowing for this, it is still possible to compare key figures and draw conclusions from the results.

Within the Initiative, it is voluntary to report emissions from the cultivation of raw materials and the production of beverages outside a company's own business operations. A few of the companies have chosen to do this. Of the total emissions for a company in the industry, cultivation and production are both significant components and participants in the Initiative are keen to work to reduce the climate impact from these parts of the life cycle.



Next step

During the year, participants in the Beverage Industry's Climate Initiative worked to develop sub-goals for the lead up to 2030. The goals are meant to be an umbrella that everyone can gather together under. The participants set their own goals and run activities that favourably relate to their own business while still upholding the foundations, vision and goals of the Beverage Industry's Climate Initiative. The goals for the Beverage Industry's Climate Initiative relate to fossil-free freight transport, resource-efficient packaging, renewable energy and measurement of primary production and cultivation.

The Beverage Industry's Climate Initiative continues its work towards its vision of a beverage industry without impact on the climate, where every drop counts. We would be pleased to welcome more of Systembolaget's beverage suppliers to join us on this journey and thereby make the Initiative an even greater success.





Concluding word

The beverage industry's Climate Initiative is proof of how an entire industry can work together towards the goal of contributing to our common climate challenge and being an inspiration to more people! We want to influence the climate in a positive direction and our work requires accuracy, dialogue and patience.

We will continuously share our progress. The work will take time, but we are convinced that we, one drop at a time, are moving in the right direction.

Welcome to follow our journey!



