

## 1. Management Statement

Making sustainable chocolate the norm by 2025, can only be achieved by embedding sustainability into the heart of our business strategy. In fiscal year 2017/18, we have made great progress towards the targets set in 2016. Our quantified, time-bound objectives enable us to engrain our sustainability agenda across all our business functions. The progress data show how, through our sourcing, processing and sales, Barry Callebaut is driving change, supporting cocoa farming communities, reducing resource consumption in our factories and driving the uptake of sustainably sourced chocolate.

We are confidently progressing towards systemic change in the chocolate value chain. There remains a lot to be done, but through assessing, learning and investing, we are confidently increasing the adoption of innovative approaches to drive verifiable impact, and make sustainable chocolate the norm by 2025.

This report presents a summary of the Forever Chocolate and GRI relevant activities and key performance indicators (KPIs) implemented during the year 2017/18. It is based on the work performed by Barry Callebaut and its subsidiaries as well as partners we collaborate with on implementing our activities. The reported KPIs are reviewed by PricewaterhouseCoopers LLP (PwC) at Barry Callebaut's offices, cocoa communities in the countries where Forever Chocolate activities are implemented as well as at our sites.

This report, covering the financial year ended 31 August 2018, presents the results of a limited assurance level verification following the ISAE 3000 assurance standard, providing Barry Callebaut's stakeholders with an enhanced level of confidence in relation to progress towards the Forever Chocolate targets. The exact scope, nature and conclusion of assurance are highlighted in the Independent Assurance Report of PricewaterhouseCoopers LLP on pages 2-5.

We selected and applied appropriate policies and processes in preparing the data in this report. We have also understood the GRI requirements for identifying the standards relevant to the reporting of the KPIs presented and applied those standards to address the GRI requirements. We believe that the KPIs presented are complete and accurate. At the same time Barry Callebaut believes that the assessment criteria is suitable for the purpose of measuring and evaluating the KPIs presented in the report.

We are confident and shall be responsible for the information presented in this document being complete and accurate in all material respects, and prepared in accordance with the Reporting Criteria in Appendix A of this document.



**Antoine de Saint-Affrique**  
Chief Executive Officer

5 December 2018



## Independent Limited Assurance Report to the Directors of Barry Callebaut AG

The Board of Directors of Barry Callebaut AG engaged us to provide limited assurance on the information described below and set out in Barry Callebaut AG's Forever Chocolate Progress Report for the year ended 31 August 2018.

### **Our conclusion**

**Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the year ended 31 August 2018 has not been prepared, in all material respects, in accordance with the Reporting Criteria.**

This conclusion is to be read in the context of what we say in the remainder of our report.

### **Selected Information**

The scope of our work was limited to assurance over the numerical KPIs contained in the Forever Chocolate Progress Report (the "Selected Information").

The Selected Information consists of the numerical KPIs outlined alongside the Reporting Criteria in Appendix A.

Our assurance does not extend to information in respect of earlier periods or to any other information included in the Forever Chocolate Progress Report.

### **Professional standards applied and level of assurance**

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' and, in respect of the greenhouse gas emissions, in accordance with International Standard on Assurance Engagements 3410 'Assurance engagements on greenhouse gas statements', issued by the International Auditing and Assurance Standards Board. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

### **Our Independence and Quality Control**

We applied the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control (UK) 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our work was carried out by an independent team with experience in sustainability reporting and assurance.

### **Understanding reporting and measurement methodologies**

The Selected Information needs to be read and understood together with the Reporting Criteria, which Barry Callebaut AG is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and

measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. The Reporting Criteria used for the reporting of the Selected Information are as at 31 August 2018.

### **Work done**

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. In doing so, we:

- made enquiries of Barry Callebaut AG's management in their offices in Zurich, Côte d'Ivoire, Ghana and Cameroon, and remotely in their offices in Indonesia, Tanzania and Brazil;
- made enquiries of operational staff, Farmer Group management teams and cocoa farmers aligned with the Forever Chocolate program;
- evaluated the design of the key structures, systems, processes and controls for managing, recording and reporting the Selected Information. This included analysing and visiting a number of Farmer Groups and Cocoa Farms in Côte d'Ivoire, Ghana and Cameroon, selected on the basis of their inherent risk and materiality to the group, to understand the key processes and controls for reporting site performance data to the local and group reporting teams;
- performed limited substantive testing on a selective basis of the Selected Information at the following locations to check that data had been appropriately measured, recorded, collated and reported:
  - Barry Callebaut AG head office in Zurich;
  - SACO head office in Côte d'Ivoire;
  - Nyonkopa head office in Ghana;
  - SIC head office in Cameroon;
  - Farmer Groups in Côte d'Ivoire, Ghana and Cameroon;
  - Cocoa Farms in Côte d'Ivoire, Ghana and Cameroon; and
- considered the disclosure and presentation of the Selected Information.

Our testing procedures included but were not limited to:

- re-performing calculations performed by management based on central records;
- inspecting meeting minutes to support assertions made and actions performed by management;
- reconciling locally-maintained paper documents to central records;
- interviewing Farmer Group management and cocoa farmers;
- inspecting contractual documents and delivery documentation to support delivery of cocoa from farmers to Farmer Groups and to SACO, Nyonkopa and SIC;
- inspecting training records and exam results to support farmer trainer accreditation;
- inspecting training attendance records for farmers participating in training sessions;
- inspecting records of farmers participating in the Farm Business Plan and Productivity Package;

- physical inspection of areas of farmland replanted and prepared for replantation;
- inspecting interview records and results with farmers regarding instances of child labour;
- inspecting records of identified child labour cases;
- inspecting Premium contracts and payments to Farmer Groups;
- inspecting census survey results for Côte d'Ivoire, Ghana and Cameroon to support farmer income, farm size and cocoa yield declaration;
- re-performing the poverty KPI calculation and performed a reasonableness test on the assumptions used by management to ensure that these are appropriate;
- performing inquiry with Denkstatt to understand Barry Callebaut AG's carbon footprinting tool and inspecting source data to agree to a sample of key inputs;
- considering the reasonableness of assumptions used by management;
- performing a walkthrough of the GPS mapping exercise in Côte d'Ivoire, Ghana and Cameroon;
- inspecting source data to agree to a sample of farms mapped; and
- performing a reasonableness test on areas mapped as 'protected' and cross referencing to third party evidence.

PricewaterhouseCoopers LLP

**PricewaterhouseCoopers LLP**  
**Chartered Accountants**

**London**

**5 December 2018**

### **Barry Callebaut AG's responsibilities**

As explained in Section 1, the Management Statement to the Forever Chocolate Progress Report, the Directors of Barry Callebaut AG are responsible for:

- designing, implementing and maintaining internal controls over information relevant to the preparation of the Selected Information that is free from material misstatement, whether due to fraud or error;
- establishing objective Reporting Criteria for preparing the Selected Information;
- measuring and reporting the Selected Information based on the Reporting Criteria; and
- the content of the Forever Chocolate Progress Report.

### **Our responsibilities**

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Directors of Barry Callebaut AG.

This report, including our conclusions, has been prepared solely for the Board of Directors of Barry Callebaut AG in accordance with the agreement between us, to assist the Directors in reporting Barry Callebaut AG's Selected Information. We permit this report to be published on Barry Callebaut AG's website<sup>e</sup>, subject to an access controlled click-through disclaimer, in relation to the Forever Chocolate Progress Report for the year ended 31 August 2018, to assist the Directors in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors and Barry Callebaut AG for our work or this report except where terms are expressly agreed between us in writing.



## Independent Limited Assurance Report to the Directors of Barry Callebaut AG

The Board of Directors of Barry Callebaut AG engaged us to provide limited assurance on the information described below and set out in the GRI Report 2017/18 (“GRI Report”) for the year ended 31 August 2018.

### Our conclusion

**Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the year ended 31 August 2018 has not been prepared, in all material respects, in accordance with the Reporting Criteria.**

This conclusion is to be read in the context of what we say in the remainder of our report.

### Selected Information

The scope of our work was limited to assurance over the KPIs contained in the GRI report (the “Selected Information”).

The Selected Information consists of the numerical KPIs presented alongside the Reporting Criteria in Appendix A.

Our assurance does not extend to information in respect of earlier periods or to any other information included in the GRI report for the year ended 31 August 2018.

### Professional standards applied and level of assurance

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) ‘Assurance Engagements other than Audits and Reviews of Historical Financial Information’, issued by the International Auditing and Assurance Standards Board. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

### Our Independence and Quality Control

We applied the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control (UK) 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our work was carried out by an independent team with experience in sustainability reporting and assurance.

### Understanding reporting and measurement methodologies

The Selected Information needs to be read and understood together with the Reporting Criteria, which Barry Callebaut AG is solely responsible for selecting and applying in order to address the GRI requirements. The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. The Reporting Criteria used for the reporting of the Selected Information are as at 31 August 2018.

### Work done

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. In doing so, we:

- considered the requirements laid out in the GRI Standards (encapsulating the Universal Standards GRI 101, 102 and 103 as well as the Topic-specific Standards GRI 200, 300 and 400);
- made enquiries of Barry Callebaut AG’s management in their offices in Zurich, Côte d’Ivoire, Ghana and Cameroon, and remotely in their offices in Indonesia, Tanzania and Brazil;
- made enquiries of operational staff, Farmer Group management teams and cocoa farmers registered with Barry Callebaut AG’s sustainability program;
- evaluated the design of the key structures, systems, processes and controls for managing, recording and reporting the Selected Information. This included analysing and visiting a number of Farmer Groups and Cocoa Farms in Côte d’Ivoire, Ghana and Cameroon, selected on the basis of their inherent risk and materiality to the group, to understand the key processes and controls for reporting site performance data to the local and group reporting teams;
- performed limited substantive testing on a selective basis of the Selected Information at the following locations to check that data had been appropriately measured, recorded, collated and reported:
  - Barry Callebaut AG head office in Zurich;
  - SACO head office in Côte d’Ivoire;
  - Nyonkopa head office in Ghana;
  - SIC head office in Cameroon;
  - Farmer Groups in Côte d’Ivoire, Ghana and Cameroon;
  - Cocoa Farms in Côte d’Ivoire, Ghana and Cameroon; and
- considered the disclosure and presentation of the Selected Information.

Our testing procedures included but were not limited to:

- re-performing calculations performed by management based on central records;
- inspecting meeting minutes to support assertions made and actions performed by management;
- reconciling locally-maintained paper documents to central records;
- interviewing Farmer Group management and cocoa farmers;
- inspecting documents (e.g. the Supplier code) at Farmer Group level;
- performing a walkthrough of the GPS mapping exercise in Côte d’Ivoire, Ghana and Cameroon;
- inspecting source data to agree to a sample of farms mapped;
- performing a reasonableness test on areas mapped as ‘protected’ and cross referenced to third party evidence;
- inspecting records of farmers participating in the Farm Business Plan and Productivity Package;

- physical inspection of the existence and classification of demonstration plots and replanted farms;
- considering the reasonableness of assumptions used by management;
- performing inquiry with Denkstatt to understand Barry Callebaut AG's carbon footprinting tool and inspecting source data to agree to a sample of key inputs;
- inspecting Barry Callebaut AG's legal database to check for the existence of any legal cases for anti-competitive behaviour, non-compliance in social or economic areas and public legal cases raised against Barry Callebaut AG in FY18;
- inspecting Barry Callebaut AG's compliance database to check for the existence and nature of any reported cases of corruption and employee discipline/dismissal;
- inspecting energy invoices and factory reports;
- obtaining evidence relating to Operational Health & Safety Indicators at Barry Callebaut AG's factories;
- inspecting evidence relating to Barry Callebaut AG's HR data; and
- inspecting SMETA reports of Barry Callebaut AG's factories.

*PricewaterhouseCoopers LLP*

**PricewaterhouseCoopers LLP**  
**Chartered Accountants**  
**London**  
**5 December 2018**

### ***Barry Callebaut AG's responsibilities***

As explained in Section 1, the Management Statement to the GRI report, the Directors of Barry Callebaut AG are responsible for:

- understanding the GRI requirements for identifying the standards relevant to the reporting of the Selected Information;
- applying the relevant GRI standards to address the GRI requirements and, where necessary, further developing the Reporting Criteria for preparing the Selected Information;
- disclosing the Reporting Criteria used alongside the Selected Information;
- designing, implementing and maintaining internal controls over information relevant to the preparation of the Selected Information that is free from material misstatement, whether due to fraud or error;
- measuring and reporting the Selected Information based on the Reporting Criteria; and
- the content of the GRI report.

### ***Our responsibilities***

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Directors of the Barry Callebaut AG.

This report, including our conclusions, has been prepared solely for the Board of Directors of Barry Callebaut AG in accordance with the agreement between us, to assist the Directors in reporting Barry Callebaut AG's Selected Information. We permit this report to be disclosed in the GRI report for the year ended 31 August 2018, to assist the Directors in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors and Barry Callebaut AG for our work or this report except where terms are expressly agreed between us in writing.

## Appendix A – Forever Chocolate Reporting Criteria

*This section summarizes the basis of preparation for the performance indicators within this report, presenting clarification and definition of the terminology used within the reported performance indicators.*

*A set of general definitions is first presented, as well as specific guidance in relation to each of the reported performance indicators, by section of the report.*

### **General definitions**

A **Farmer Group** is defined as an organized group of Farmers such as a cooperative or similar. See definitions for each specific country:

- Côte d’Ivoire/Cameroon: These are partnered agricultural cooperatives and Barry Callebaut own direct sourcing company, Biopartenaire
- Ghana: These are districts/branches part of Barry Callebaut's direct sourcing licensed buying company in Ghana, Nyonkopa Ltd
- Indonesia: These are Barry Callebaut's suppliers in Indonesia

FC #	KPI	Assessment Criteria
FC 1.1	No. of child labor cases identified and being remediated in our supply chain	<p>This indicator relates to the number of instances of child labor identified as part of CLMRS interviews in the year ended 31 August 2018.</p> <p>In alignment with the International Labor Organization, child labor is work that deprives children of their childhood, their potential and their dignity, interferes with their schooling and is harmful to physical and mental development. The Child Labor Monitoring Remediation System (“CLMRS”) is a system consisting of a database supported by data collection and survey applications for use on tablets and mobile phones. This indicator explores the use of the data collection and survey functionality of the CLMRS with Members of Farmer Groups in the year ended 31 August 2018.</p> <p>In using this functionality, Farmers and members of their households were surveyed regarding the number of children aged between 5 and 17 residing in the household. Where such children were identified, they were individually</p>

		<p>surveyed regarding their role on the farm, and observation visits were subsequently performed at related farms.</p> <p>As part of these interviews with children and observations regarding their role on the farm, a number of children were identified as performing tasks considered to be dangerous. Such instances have been recorded within the “child labor cases identified”.</p> <p>The definitions of "child labor cases identified" in this indication have been taken from the International Labour Organization (ILO). The different categories of child labor as described by ILO can be inferred below:</p> <ul style="list-style-type: none"> <li>● 'Heavy child labor'. These are tasks considered to be dangerous, such as the handling of heavy equipment or use of farming chemicals. These are classed as a "child labor case identified" for children of all ages.</li> <li>● 'Light child labor'. These are tasks which are less dangerous but can still be hazardous, such as weeding with a machete or removing beans from cocoa pods broken by adults. These are classed as a "child labor case identified" for all children under the age of 13 years old, and for children of ages from 13 to 17 years old depending on the number of hours they have been performing these tasks per week.</li> </ul> <p>Additionally, this indicator includes child labor cases identified in Farmer Groups, which are part of Barry Callebaut's Child Labor Monitoring and Remediation (CLMRS) program as well as child labor cases identified in Farmer Groups, which are not part of the CLMRS program but have been surveyed by Barry Callebaut's external surveyors.</p> <p>There have been no child labor remediation activities in the year ended 31 August 2018.</p> <p>Origins in scope: Côte d’Ivoire, Ghana</p>
FC 1.2	% of the farmer groups we directly source from that have systems in place to prevent, monitor and remediate child labor	<p>This indicator relates to the proportion of Farmer Groups, from which Barry Callebaut directly source, that have systems in place to prevent, monitor and remediate child labor.</p> <p>This includes Farmer Groups which are part of Barry Callebaut's Child Labor Monitoring and Remediation (CLMRS) program as well as Farmer Groups which are not part of CLMRS but have been surveyed by Barry Callebaut's</p>



		<p>external surveyors to verify if they have systems in place to prevent, monitor and remediate child labor.</p> <p>'System' is defined as Child Protection Committee (CPC) or Child Labor Monitoring and Reporting System (CLMRS). The applicable definition of a robust and functioning system is in accordance with the CocoaAction methodology developed by the World Cocoa Foundation:</p> <p><b>Child Protection Committee (CPC)</b></p> <ul style="list-style-type: none"> <li>- CPC exists</li> <li>- CPC meetings are regular</li> <li>- Minimum of one CPC meeting in the reporting year 2017/18</li> <li>- Members of CPC are trained on child protection, child labor case management, child labor monitoring and remediation</li> </ul> <p><b>Child Labor Monitoring and Remediation System (CLMRS)</b></p> <ul style="list-style-type: none"> <li>- CLMRS exists</li> <li>- Data is collected and children are surveyed about their involvement in light and hazardous work</li> <li>- Individuals responsible for CLMRS are trained on child protection, child labor case management, child labor monitoring and remediation</li> <li>- Equipment for individuals responsible for CLMRS is available (e.g. awareness raising material)</li> </ul> <p>Barry Callebaut collects information on the existence of CPC and CLMRS on a Farmer Group level through a declaratory survey tailored for leaders of Farmer Groups or sections of Farmer Groups.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon, Indonesia</p>
FCS 1.4	1.4.1 No. of Farmers covered by CL monitoring and remediation activities	<p>This indicator refers to the number of cocoa farmer households which participated in survey interviews, in the year ended 31 August 2018, as part of the household surveys covered by child labor monitoring and remediation activities.</p> <p>This indicator was calculated using the data collected from Farmer Groups, which are part of Barry Callebaut's CLMRS program.</p> <p>Origins in scope: Côte d'Ivoire, Ghana</p>
FCS 1.4	1.4.2 No. of Farmer Groups covered by CL monitoring and remediation activities	<p>This indicator refers to the number of Farmer Groups covered by child labor monitoring and remediation activities implemented by Barry Callebaut.</p>



		Origins in scope: Côte d'Ivoire, Ghana
FCS 1.6	100% of Cocoa Horizons communities and societies assessed to determine risk profile of CL	<p>A third party consultant database, Maplecroft, has been used in order to assess the risk profile of child labor in Côte d'Ivoire, Ghana and Cameroon based on the countries' labor laws and overall child labor risk. The assessment has been done at country level and as such when a country has been assessed, it is assumed that all communities and societies within that country have also been assessed.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon</p>
FC 2.1	No. of cocoa Farmers out of poverty, measured against the WB USD 1.90/day threshold for extreme poverty	<p>this indicator has been determined by:</p> <ul style="list-style-type: none"> <li>• Obtaining survey information from Farmers in Côte d'Ivoire, Ghana and Cameroon regarding their household income generation from cocoa and other activities, as well as the size of their household;</li> <li>• Using in-country market prices for cocoa and other crops to determine an average income level for those Farmers; and</li> <li>• Comparing this average income level to the \$1.90 (USD) per day worldwide extreme poverty threshold set by the World Bank, adjusted for purchasing power and cost of living in Ghana, Côte d'Ivoire and Cameroon.</li> </ul> <p>More information on each of these bullet points is provided below:</p> <p><b>Survey information</b></p> <p>Census surveys were undertaken with farmer households in Côte d'Ivoire, Ghana and Cameroon during the financial year ended 31 August 2018, as part of the Cocoa Horizons program. The results from the surveys were then sense checked against literature studies from an independent center of expertise and education for sustainable development, KIT Royal Tropical Institute. The census surveys and KIT study provided estimates over the following key metrics:</p> <ul style="list-style-type: none"> <li>• the average yield per farm</li> <li>• income from cocoa farming</li> <li>• other income-generating activities</li> <li>• cocoa farm size</li> <li>• number of household members</li> </ul> <p>Outliers from the census results have been removed and in some instances, the census results have been calibrated to match literature studies, in order to provide a more prudent analysis of the results. The assumptions and data calibration</p>

		<p>were performed by Barry Callebaut across the census results from Côte d’Ivoire, Ghana and Cameroon are summarized below:</p> <ul style="list-style-type: none"> <li>● Census surveys where the Farmers have declared 0 cocoa yield and other income have been discarded</li> <li>● If the cocoa weight declared by the Farmers has an implied yield of more than 1,495 kg/ha (in Côte d’Ivoire and Cameroon) and 835 kg/ha (in Ghana), these were deemed to be a significant deviation from the KIT study and excluded from the analysis</li> <li>● In Ghana, non-cocoa income declarations have been adjusted to 40% of the cocoa income to reflect the KIT study</li> <li>● In Ghana, the declared farm size (hectares) was adjusted by a factor of 1.73 to match the KIT study</li> <li>● In Côte d’Ivoire, if no answer was provided regarding the number of household then it is assume that the farmer will have 6.9 household members based on the KIT study</li> <li>● In Côte d’Ivoire, Farmers claiming to have non-cocoa agricultural income above 5 Million CFA have been removed from the census results as it is deemed to be a significant deviation</li> </ul> <p><b>Market prices</b> Barry Callebaut relies on its knowledge of origin markets to determine prices of cocoa and other crops.</p> <p><b>Worldwide extreme poverty threshold</b> The \$1.90 (USD) per day worldwide extreme poverty threshold set by the World Bank has been used to determine the number of Farmers out of poverty. The \$1.90 poverty line has been adjusted for each country to reflect the purchasing power and cost of living in Côte d’Ivoire, Ghana and Cameroon. This has been taken from the World Bank database.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon</p>
FC 2.2	No. cocoa Farmers who have access to farm services (coaching, input such as tools and seedlings, or finance)	<p>This indicator relates to the number of Farmers who, in the year ended 31 August 2018, had performed at least one of the following:</p> <ol style="list-style-type: none"> <li>(1) Signed a contract to participate in and gain access to the Productivity Packages;</li> <li>(2) signed a contract to participate in and gain access to the Replanting Package;</li> <li>(3) received cocoa seedlings;</li> <li>(4) received shade trees;</li> <li>(5) received tools such a pruners;</li> <li>(6) received assistance in the form of finance or access to</li> </ol>

		<p>finance; or (7) received a calculated Farm Business Plan.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Tanzania, Indonesia, Brazil</p>
FCS 2.2.1	No. of Farmers receiving cocoa seedlings	<p>This indicator relates to the number of Farmers who have received at least one cocoa seedling during the year through community nurseries or through participation in the Replanting Package during the year ended 31 August 2018.</p> <p>In Côte d'Ivoire, Farmers with access to the Replanting Package have received 1,000 cocoa seedlings per hectare of their farm.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Tanzania, Indonesia, Brazil</p>
FCS 2.2.2	No. of cocoa seedlings distributed	<p>This indicator relates to the number of cocoa seedlings distributed to Farmers through community nurseries or through the Replanting Package during the year ended 31 August 2018.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Tanzania, Indonesia, Brazil</p>
FCS 2.2.3	No. of Farmers receiving shade tree seedlings distribution	<p>This indicator relates to the number of Farmers who have received at least one shade tree seedling (i.e. those trees planted to provide sufficient shade to aid the growth and productivity of cocoa plants) through community distribution or through participation in the Replanting Package during the year ended 31 August 2018.</p> <p>In Côte d'Ivoire, Farmers with access to the Replanting Package have received 140 shade tree seedlings per hectare of their farm.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Tanzania</p>
FCS 2.2.4	No. of shade trees distributed	<p>This indicator relates to the number of shade tree seedlings distributed to Farmers through community distribution or through the Replanting Package during the year ended 31 August 2018.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Tanzania</p>

FC 2.3	No. of hectares replanted with cocoa and other species	<p>This indicator measures the number of hectares owned by cocoa Farmers who have signed up for the Replanting Package and received cocoa seedlings and shade tree seedlings as a result.</p> <p>The hectares replanted includes both ‘underplanting’ and fully replanted plots.</p> <p><b>Full replanting</b> refers to the removal of old cocoa trees and replacing them with young cocoa seedlings.</p> <p><b>‘Underplanting’</b> refers to the planting of young cocoa seedlings alongside old cocoa trees, which are removed only after new cocoa trees start to bear fruit. Furthermore, a number of shade trees are planted alongside the young cocoa seedlings.</p> <p>In Côte d'Ivoire 1000 cocoa seedlings and 140 shade trees are distributed as part of the Replanting Package.</p> <p>In Tanzania, the number varies based on individual farmer and plot needs.</p> <p>Origins in scope: Côte d'Ivoire, Tanzania</p>
FC 2.4	% productivity improvement	<p>Barry Callebaut implements a Farmer Field Book approach (FFB) in Côte d'Ivoire in partnership with IDH the Sustainable Trade Initiative, UTZ Certified, and Agri-Logic. The methodology uses records from daily farming activities, investments and returns of Farmers who implement Productivity Package. The increase in productivity is measured against a control group of Farmers without Productivity Package.</p> <p>Origins in scope: Côte d'Ivoire</p>
FCS 2.5	No. of Farmers involved in sustainability programs	<p>This indicator represents the total number of registered cocoa Farmers who are part of one of the sustainability programs and which belong to Barry Callebaut’s direct and traceable sourcing model globally: Cocoa Horizons, UTZ, Rain Forest Alliance, Fair Trade, Organic and Barry Callebaut’s client-specific sustainability projects.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon, Indonesia, Brazil</p>
FCS 2.5.1	No. of Farmers trained on Good Agricultural Practice (GAP)	<p>This indicator represents the number of Farmers who have attended at least one training session on Good Agricultural Practice. For Côte d'Ivoire and Indonesia, there are specific GAP modules which are taught to Farmers as follows:</p> <ul style="list-style-type: none"> <li>- Harvest and post-harvest management;</li> </ul>

		<ul style="list-style-type: none"> <li>- Pests &amp; diseases (IPM);</li> <li>- Pruning, soil health and fertility; and</li> <li>- Crop calendar.</li> </ul> <p>In Ghana, a farmer is considered to have been trained in GAP if they have attended at least one of the three relevant modules:</p> <ul style="list-style-type: none"> <li>- Crop calendar;</li> <li>- Pruning; or</li> <li>- Integrated pest management.</li> </ul> <p>In Indonesia, a farmer is considered to have been trained on GAP if they have attended at least one of the four relevant modules:</p> <ul style="list-style-type: none"> <li>- Pruning;</li> <li>- Sanitation &amp; fertilizer;</li> <li>- Integrated pest management;</li> <li>- Yield estimation &amp; post-harvest; or</li> <li>- Farm rehabilitation.</li> </ul> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon, Indonesia</p>
FCS 2.5.2	No. of Farmers trained on Child Labor	<p>This indicator represents the number of Farmers who have attended at least one training session on Child Labor in cocoa farming communities.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon, Indonesia</p>
FCS 2.6	No. of Farmers who have access to the Farm Business Plan	<p>This indicator relates to the number of Farmers for whom a Farm Business Plan was calculated, offered and signed during the year ending 31 August 2018.</p> <p>Origins in scope: Côte d'Ivoire, Indonesia</p>
FCs 2.7	No. of Farmers who have access to the Productivity Package	<p>This indicator represents the number of Farmers who have signed a contract to participate in a Productivity Package during the year ended 31 August 2018.</p> <p>In Côte d'Ivoire, the Productivity Package refers to a package tailored for each farmer to aid in the productivity of their farm, depending on farm size and needs. The Productivity Package for each individual farmer is defined in the credit contract. The minimum package includes:</p> <ul style="list-style-type: none"> <li>● Saw and pruning shears;</li> <li>● 5 days training on pruning; and</li> <li>● Application of one or a combination of insecticides, pesticides, fertilizers and fungicides.</li> </ul> <p>In Ghana, the Productivity Package for the year ended 31 August 2018 includes only the disbursement of pruning shears.</p>

		Origins in scope: Côte d'Ivoire, Ghana
FCS 2.8	No. of Farmers who have access to the Replanting Package	<p>This indicator relates to the number of Farmers who have signed a contract to participate in the Replanting Package during the year ended 31 August 2018.</p> <p>As part of the Replanting Package Farmers will be provided a credit to finance the replantation of their farm. The credit is for a period of 5 years and covers the following:</p> <ul style="list-style-type: none"> <li>- Planting equipment</li> <li>- Lining and land clearing</li> <li>- Cocoa seedling distribution</li> <li>- Shade trees seedling distribution</li> <li>- Coaching and training</li> </ul> <p>Origins in scope: Côte d'Ivoire, Tanzania</p>
FC 3.1	Million tonnes CO2 - the carbon footprint of our supply chain from farm to customer	<p>An organizational carbon footprint is defined as the total emissions caused by all activities of Barry Callebaut. The company uses a tailored tool developed together with experts from Denkstatt GmbH, which includes calculation for Scope 1 - 3 emissions.</p> <p>Barry Callebaut measures its CO2e footprint along the entire supply chain. The areas include:</p> <ol style="list-style-type: none"> <li>1. Cocoa farming and production</li> <li>2. Non-cocoa ingredients production</li> <li>3. Transport of ingredients, products and employee flights</li> <li>4. Operation of cocoa factories, chocolate factories and specialty factories</li> <li>5. Packaging and offices</li> </ol> <p><b><u>1. Cocoa farming and production</u></b></p> <p>Carbon footprint from cocoa farming and production includes the following areas: Direct land use change (LUC),</p>

Indirect LUC, cocoa farming. These areas cover the following steps in calculation and Barry Callebaut relies on the following data sources:

#### Direct LUC

The calculation of direct LUC consists of the quantification of total net carbon loss on cocoa land, the allocation of net carbon loss to cocoa and other crops, and the depreciation of cocoa specific carbon loss over year 5 to 50 (there are no cocoa crops in year 1-4).

Where source data is unavailable, academic literature and the Global Forest Watch data is used.

#### Indirect LUC

CO<sub>2</sub> emissions from Indirect LUC refer to cocoa farms established on other cropland if the substituted crops are not contracting globally (i.e. stable or increasing production volumes).

#### Cocoa farming

The activities related to cocoa farming, production and the usage of fertilizers constitute the relevant carbon footprint.

The highest uncertainty is related to the share of farms in a given country which have (a) younger trees than 21 years (and have up to 17 productive years) and which b) have been established on natural (forest) land. Barry Callebaut assumes 16 productive cocoa years within the 20 years lifetime of a cocoa tree.

An assumed carbon emissions factor of 3.66 kg CO<sub>2</sub>e / kg cocoa is applied for cocoa farming LUC and deemed reasonable based on sensitivity analyses performed.

## **2. Non-cocoa ingredients production**

Barry Callebaut considers the following ingredient groups in its carbon footprint model: dairy, sugar (beet and cane), oils and fats, sweeteners, nuts, additives, specialties, emulsifiers, flavors and others. Carbon footprint impacts of ingredients are always calculated by multiplying volumes of specific materials with suitable GHG emission factors.

For relevant dairy, sugar, oils and fats, and emulsifiers ingredients, the model differentiates between countries of origin, or between specific suppliers, or between conventional, organic, and volumes which are sustainably



certified. LUC impacts are considered for dairy, sugar, oil and emulsifier ingredients where relevant.

92% of the total volume of ingredients is linked to specific datasets; 2% of the total volume of ingredients uses estimated GHG emission factors; for the remaining 6% of the total volume of ingredients, GHG emission factors are extrapolated from factors for other ingredients in the same subgroup.

Sources for emissions factors are the WFLDB for dairy, sugar, and oils and fats, and Ecoinvent version 3.4 for rest of the ingredients.

### **3. Transport**

For transporting cocoa and chocolate, Barry Callebaut has developed a refined tool for calculating the carbon footprint of cocoa and chocolate transportation. It combines specific data on distances, transported volumes, transport modes (ship, truck type, liquid / solid, standard / solid cooled), and payload utilization of trucks, with GHG emission factors which are calculated for each specific transport situation.

Furthermore, the Company uses a “transport coefficient model”, which allows the calculation of GHG emission factors for each specific truck transport situation, linked to truck size, actual payload utilization, and share of empty trips. Emission factors are calculated for standard, heated and cooled trucks. The transport coefficient model also lists GHG emission factors for train transports and ship transports. Emission factors from Ecoinvent version 3.4 are used for the calculation.

For transportation of cocoa beans and non-cocoa ingredients, Barry Callebaut uses annual sourced volumes, and for cocoa beans also refers to the mix of origin countries.

### **4. Operation of cocoa factories, chocolate factories and specialty factories**

Carbon footprint represents the energy consumption of factories for cocoa processing, chocolate production and specialty production). Supplier-specific electricity mixes are considered where available; otherwise country mix is applied for all factories. Energy elements considered for the carbon footprint calculation are collected on a factory level

		<p>and include electricity (non-renewable and renewable sources), fuel, gas, steam, heat and water.</p> <p>Barry Callebaut uses a list of standard CO2e factors for energy use in all factories. The reference databases are Ecoinvent version 3.4 and IEA 2016 (International Energy Agency). A value of 3.66 kg CO2e / kg cocoa beans is used as a global proxy for all cocoa beans processed.</p> <p><b><u>5. Packaging and offices</u></b></p> <p>Packaging and offices make up the residual balance of Barry Callebaut’s CO2e footprint.</p> <p><u>Packaging</u> The volume of packaging is obtained from sourced data and multiplied by the Global Warming Potential (GWP) obtained from Ecoinvent version 3.2.</p> <p><u>Offices</u> The office CO2e footprint consists of domestic and international flights, and office electricity and gas use based on office areas in Zurich, Chicago and Singapore. The relevant GWP is obtained from Ecoinvent version 3.2.</p> <p><b>Re-baselining</b> Barry Callebaut re-baseline figures if there is a material change in the methodology applied within the model, or if updates to the emissions factors have a material impact to the results.</p>
FC 3.3	CO2e intensity per ton of product	This indicator is referring to the total carbon footprint reported above, divided by the total volumes of cocoa and chocolate products sold to third parties in FY 2017/18.
FC 3.4	% of raw material volume proven to be free from deforestation	<p>‘Deforestation-free’ refers to raw materials that have not been sourced from a 'Protected Forest' (as defined by the host government). Barry Callebaut identifies the location and area of these 'Protected Forests' by using data from a variety of sources, including the WDPA (World Database of Protected Areas). Barry Callebaut has identified cocoa bean production sites via GPS mapping (farm polygons). It is calculated based on the proportion of raw materials sourced from high-risk countries, which are not located in a 'Protected Forest', divided by the total volume of all raw materials sourced from high-risk countries.</p> <p>‘Raw material’ refers to any material used for chocolate production (e.g. cocoa, sugar, dairy, vanilla, hazelnuts). All</p>

		<p>volumes represent actually sourced volumes for chocolate production in the year ended 31 August 2018.</p> <p>Risk profiles of ingredients are obtained from the 'Maplecroft Index', where a score of 6 or higher is high risk and a score below 6 is low risk.</p> <p>The following assumptions have been made:</p> <ul style="list-style-type: none"> <li>• All cocoa sourced is considered to be from a 'high risk' country according to the 'Maplecroft Index'. Where the country-specific information is not available on Maplecroft, it is automatically determined to be 'high risk' by Barry Callebaut.</li> <li>• For non-cocoa raw materials, the risk rating is assumed based on the country of origin. Where country-specific information is not available, Barry Callebaut applies risk ratings from a representative proxy country.</li> <li>• Only cocoa sourced from an area which is not a 'Protected Forest' (as defined by the host government) is considered to be proven free from deforestation.</li> </ul>
FCS 3.5	No. of farms which have been mapped	<p>This indicator relates to the number of farm plots, owned by Farmers who have sold their cocoa to Barry Callebaut (both directly and indirectly), which have been mapped during the year ended 31 August 2018.</p> <p>Mapping is performed by Barry Callebaut staff, or by external consultants appointed by Barry Callebaut, using a GPS tracker and the data is entered onto Barry Callebaut's cloud-based solution, Katchilè,</p> <p>Note that this KPI refers to the number of farm plots mapped, therefore where a Farmer has three farms mapped, it is reported as three.</p> <p>Origins in scope: Côte d'Ivoire, Ghana, Cameroon, Indonesia</p>
FCS 3.6	No. of factories using renewable electricity sources increased by XX to XX in the year ended 31 August 2018	<p>A factory is considered to be using renewable electricity sources if more than 99% of electricity used at the factory comes from renewable sources (e.g. hydroelectric) as at the year ended 31 August 2018. Barry Callebaut acknowledges a residual risk of electricity consumption coming from conventional sources from the energy suppliers.</p>
FC 4.1	% of agricultural raw material sustainable sourced	<p>This indicator is calculated as the combination of sustainably sourced cocoa and non-cocoa ingredients over total volume of cocoa and non-cocoa ingredients, as detailed below in FC 4.2 and 4.3.</p>

FC 4.2	% of sustainably sourced cocoa	<p>This indicator measures the proportion of sustainably sourced cocoa over total volume of cocoa sourced during the year ended 31 August 2018.</p> <p>Sustainably sourced cocoa is considered that which is purchased from certified or verified sustainable sources.</p> <p>Cocoa certifications considered “sustainable” in this context are Rain Forest Alliance, UTZ, Fair Trade, Fair for Life, Cocoa Horizons and any combination of those.</p>
FC 4.3	% of sustainably sourced non-cocoa raw materials (sugar, dairy, palm oil, coconut oil, soy lecithin vanilla, nuts)	<p>This indicator is calculated as certified sustainable volume over total volume of non-cocoa ingredients sourced* during the year ended 31 August 2018.</p> <p>*Due to limitations in the internal reporting system at Barry Callebaut, sales volumes of these raw materials, used as constituents of chocolate products in the year ended 31 August 2018, are used as a proxy for sourcing volumes.</p> <p>All non-cocoa raw materials are based on agricultural materials sourced for chocolate production. Ingredients include beet sugar, cane sugar, dairy, palm oil, soy and soy lecithin, vanilla, coconut oil, hazelnuts and other similar ingredients.</p> <p>Sustainably sourced non-cocoa raw materials are considered that which are purchased from certified or verified sustainable sources from external sustainability certification schemes such as Bonsucro, Fairtrade, Rainforest Alliance and RSPO, as well as Barry Callebaut's own program with Prova.</p>

## GRI Reporting Criteria

*This section summarizes the basis of preparation for the performance indicators within this report, presenting clarification and definition of the terminology used within the reported performance indicators.*

*A set of general definitions is first presented, as well as specific guidance in relation to each of the reported performance indicators, by section of the report.*

### **General definitions**

*The numerical KPIs subject to independent assurance are outlined in the table below. Each KPI has been prepared with reference to the requirements laid out in the applicable GRI Standards, which can be found on GRI's website: <https://www.globalreporting.org/standards/>.*

*The table below then provides extra information to assist in interpreting the GRI Standards and / or to provide additional criteria for KPIs related to Barry Callebaut-specific activities.*

GRI #	KPI	Assessment Criteria
203-2 (1)	1) No. of farmers above poverty line of USD 1.90 per day	<p>In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator has been determined by:</p> <ul style="list-style-type: none"> <li>• Obtaining survey information from farmers in Côte d'Ivoire, Ghana and Cameroon regarding their household income generation from cocoa and other activities, as well as the size of their household;</li> <li>• Using in-country market prices for cocoa and other crops to determine an average income level for those farmers; and</li> <li>• Comparing this average income level to the \$1.90 (USD) per day worldwide extreme poverty threshold set by the World Bank, adjusted for purchasing power and cost of living in Ghana, Côte d'Ivoire and Cameroon.</li> </ul> <p>More information on each of these bullet points is provided below:</p> <p><b>Survey information</b>            Census surveys were undertaken with farmer households in Côte d'Ivoire, Ghana and Cameroon during the financial year ended 31 August 2018, as part of the Cocoa Horizons program. The results from the surveys were then sense checked against literature</p>

studies from an independent center of expertise and education for sustainable development, KIT Royal Tropical Institute. The census surveys and KIT study provided estimates over the following key metrics:

- the average yield per farm
- income from cocoa farming
- other income-generating activities
- cocoa farm size
- number of household members

Outliers from the census results have been removed and in some instances, the census results have been calibrated to match literature studies, in order to provide a more prudent analysis of the results. The assumptions and data calibration were performed by Barry Callebaut across the census results from Côte d'Ivoire, Ghana and Cameroon are summarized below:

- Census surveys where the farmers have declared 0 cocoa yield and other income have been discarded
- If the cocoa weight declared by the farmers has an implied yield of more than 1,495 kg/ha (in Côte d'Ivoire and Cameroon) and 835 kg/ha (in Ghana), these were deemed to be a significant deviation from the KIT study and excluded from the analysis
- In Ghana, non-cocoa income declarations have been adjusted to 40% of the cocoa income to reflect the KIT study
- In Ghana, the declared farm size (hectares) was adjusted by a factor of 1.73 to match the KIT study
- In Côte d'Ivoire, if no answer was provided regarding the number of household then it is assume that the farmer will have 6.9 household members based on the KIT study
- In Côte d'Ivoire, farmers claiming to have non-cocoa agricultural income above 5 Million CFA have been removed from the census results as it is deemed to be a significant deviation

#### **Market prices**

Barry Callebaut relies on its knowledge of origin markets to determine prices of cocoa and other crops.

#### **Worldwide extreme poverty threshold**

The \$1.90 (USD) per day worldwide extreme poverty threshold set by the World Bank has been used to determine the number of farmers out of poverty. The \$1.90 poverty line has been adjusted for each country to reflect the purchasing power and cost of living in Côte d'Ivoire, Ghana and Cameroon. This has been taken from the World Bank database.

203-2 (2)	2) % productivity improvement	<p>In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator measures the % increase in productivity of farmers in the year ended 28 February 2018 compared against the previous year ended 28 February 2017, which includes the following inputs:</p> <ul style="list-style-type: none"> <li>• average cocoa yields per hectare;</li> <li>• farmer revenue per farm;</li> <li>• labor and fertilizer costs per farm; and</li> <li>• labor hours used per hectare of farm.</li> </ul> <p>Barry Callebaut implemented a Farmer Field Book approach (FFB) in Côte d’Ivoire in partnership with IDH the Sustainable Trade Initiative, UTZ Certified, and Agri-Logic, which assesses the impact of the Productivity Packages offered by Barry Callebaut to Farmers.</p> <p>The methodology used records from daily farming activities, investments and returns of farmers who implemented Barry Callebaut’s Productivity Package across 2017/18. The increase in productivity, if any, was measured against a control group of farmers without the Productivity Package to adjust for any environmental factors between the years.</p>
203-2 (3)	3) No. of hectares replanted	<p>In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator measures the number of hectares owned by cocoa farmers who have signed up for the Replanting Package and received cocoa seedlings and shade tree seedlings as a result.</p> <p>The hectares replanted includes both ‘underplanting’ and fully replanted plots.</p> <p><b>Full replanting</b> refers to the removal of old cocoa trees and replacing them with young cocoa seedlings.</p> <p><b>‘Underplanting’</b> refers to the planting of young cocoa seedlings alongside old cocoa trees, which are removed only after new cocoa trees start to bear fruit. Furthermore, a number of shade trees are planted alongside the young cocoa seedlings.</p> <p>In Côte d’Ivoire 1000 cocoa seedlings and 140 shade trees are distributed as part of the Replanting Package.</p> <p>In Tanzania, the number varies based on individual farmer and plot needs.</p>



203-2 (4)	4) No. of farmers involved in the sustainability program for good agricultural practices	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator represents the total number of registered cocoa farmers who are part of one of the sustainability programs and which belong to Barry Callebaut's direct and traceable sourcing model globally: Cocoa Horizons, UTZ, Rain Forest Alliance, Fair Trade, Organic and Barry Callebaut's client-specific sustainability projects.
203-2 (5)	5) No. of farmers with access to coaching / seedlings / finance	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator relates to the number of farmers who, in the year ended 31 August 2018, had performed at least one of the following: (1) Signed a contract to participate in and gain access to the Productivity Package; (2) signed a contract to participate in and gain access to the Replanting Package; (3) received cocoa seedlings; (4) received shade trees; (5) received tools such as pruners; (6) received assistance in the form of finance or access to finance; or (7) received a calculated Farm Business Plan.
203-2 (6)	6) No. of farms in our supply chain mapped	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator relates to the number of farm plots, owned by Farmers who have sold their cocoa to Barry Callebaut (both directly and indirectly), which have been mapped during the year ended 31 August 2018.  Mapping is performed by Barry Callebaut staff, or by external consultants appointed by Barry Callebaut, using a GPS tracker and the data is entered onto Barry Callebaut's cloud-based solution, Katchilè,  Note that this KPI refers to the number of farm plots mapped, therefore where a Farmer has three farms mapped, it is reported as three.
203-2 (7)	Premiums from the purchase of Cocoa Horizons products generated CHF 10.5 million	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator is as disclosed in the Barry Callebaut Annual Report 2017/18.
203-2 (8)	No. of farmers reached as part of Cocoa Horizons Foundation	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator relates to the 74,521 farmers who have delivered Horizons Cocoa in the year ended 31 August 2018.
203-2 (9)	No. of cocoa seedlings and no. of shade tree seedlings distributed	In addition to the criteria laid out within GRI standard 203, disclosure 203-2, this indicator relates to the number of cocoa seedlings and shade tree seedlings distributed to Farmers through community nurseries or through the Replanting Package during the year ended 31 August 2018.

205-1	No. of operations assessed for risk of corruption	In addition to the criteria laid out within GRI standard 205, disclosure 205-1, this indicator relates to the number of operations, which have been assessed by Barry Callebaut for risk of corruption. The term 'operations' refers to all Barry Callebaut's legal entities involved in production, storage and/or distribution goods and services, or for administrative purposes.
205-2	1) No. of governance members communicated to on Anti Bribery & Corruption 2) No. of white collar employees communicated to on Anti Bribery & Corruption 3) No. of governance body members trained in Anti-Bribery & Corruption 4) No. of white collar employees trained in Anti-Bribery & Corruption	In addition to the criteria laid out within GRI standard 205, disclosure 205-2: <ul style="list-style-type: none"> <li>• An employee/governance member having completed the 'code of conduct' e-learn is deemed to have been 'communicated' to on Barry Callebaut's anti-bribery and corruption policies and procedures; and</li> <li>• An employee/governance member having completed and passed the 'prevention of fraud and bribery' e-learn is deemed to have been 'trained' in anti-bribery and corruption.</li> </ul>
205-3 (1)	No. of investigated and no. of confirmed cases of AB&C	These indicators have been prepared with reference to the requirements laid out in the GRI standard 205, disclosure 205-3, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
205-3 (2)	No. of employees disciplined and no. dismissed	
205-3 (3)	No. of public legal cases	
206-1	No. of legal cases pending or completed for anti-competitive behavior	This indicator has been prepared with reference to the requirements laid out in the GRI standard 2016, disclosure 206-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
302-1	1) Total kWh fuel consumption from non-renewable sources 2) Total kWh gas consumption 3) Total kWh fuel consumption from renewable sources (PY: 0) 4) Total kWh electricity consumption 5) Total kWh heating and cooling consumption (PY: 0) 6) Total kWh steam consumption 7) Total kWh electricity, heating, cooling and steam sold (PY:0) 8) Total kWh energy consumption	In addition to the criteria laid out within GRI standard 302, disclosure 302-1, this indicator relates to the energy and fuel consumption of Barry Callebaut's factories in the year ended 31 August 2018.
302-3	Energy intensity ratio per tonne of activity	In addition to the criteria laid out within GRI standard 302, disclosure 302-3, which governs the approach to measuring tonnes of activity and calculating the energy intensity ratio, the term 'activity' in this indicator relates to Barry Callebaut's factory activities relating to production, storage, distribution and administration in cocoa and/or chocolate production.

303-1	Total volume of water withdrawn	In addition to the criteria laid out within GRI standard 303, disclosure 303-1, this indicator relates to the volume of water (in cubic meters) used by all Barry Callebaut factories in the year ended 31 August 2018.
304-3	No. of farms mapped	<p>In addition to the criteria laid out within GRI standard 304, disclosure 304-3, this indicator relates to the number of farm plots, owned by Farmers who have sold their cocoa to Barry Callebaut (both directly and indirectly), which have been mapped during the year ended 31 August 2018.</p> <p>Mapping is performed by Barry Callebaut staff, or by external consultants appointed by Barry Callebaut, using a GPS tracker and the data is entered onto Barry Callebaut's cloud-based solution, Katchilè,</p> <p>Note that this KPI refers to the number of farm plots mapped, therefore where a Farmer has three farms mapped, it is reported as three.</p>
305-5 (1)	Carbon footprint of supply chain from farm to customer	<p>In addition to the criteria laid out within GRI standard 305, disclosure 305-5, the company uses a tailored tool developed together with experts from Denkstatt GmbH, which includes calculations for Scope 1-3 emissions.</p> <p>Barry Callebaut measures its CO2e footprint along the entire supply chain, including:</p> <ol style="list-style-type: none"> <li>1. Cocoa farming and production</li> <li>2. Non-cocoa ingredients production</li> <li>3. Transport of ingredients, products and employee flights</li> <li>4. Operation of cocoa factories, chocolate factories and specialty factories</li> <li>5. Packaging and offices</li> </ol> <p>These areas are explained in detail below:</p> <p><b><u>1. Cocoa farming and production</u></b></p> <p>Carbon footprint from cocoa farming and production includes the following areas: direct land use change (LUC), indirect LUC and cocoa farming. These areas cover the following steps in the calculation and Barry Callebaut relies on the following data sources:</p> <p><b><u>Direct LUC</u></b></p> <p>The calculation of direct LUC consists of the quantification of total net carbon loss on cocoa land, the allocation of net carbon loss to cocoa and other</p>

crops, and the depreciation of cocoa specific carbon loss over year 5 to 20 (there are no cocoa crops in year 1-4).

Where source data is unavailable, academic literature and the Global Forest Watch data is used.

Indirect LUC

CO2 emissions from indirect LUC refer to cocoa farms established on other cropland if the substituted crops are not contracting globally (i.e. stable or increasing production volumes).

Cocoa farming

The activities related to cocoa farming, production and the usage of fertilizers constitute the relevant carbon footprint.

The highest uncertainty is related to the share of farms in a given country which have (a) younger trees than 21 years (and have up to 17 productive years) and which b) have been established on natural (forest) land. Barry Callebaut assumes 16 productive cocoa years within the 20-year lifetime of a cocoa tree.

An emissions factor of 3.66 kg CO2e / kg cocoa was applied for cocoa farming LUC.

**2. Non-cocoa ingredients production**

Barry Callebaut considers the following ingredient groups in its carbon footprint model: dairy, sugar (beet and cane), oils and fats, sweeteners, nuts, additives, specialties, emulsifiers flavors and others. Carbon footprint impacts of ingredients are always calculated by multiplying volumes of specific materials with suitable GHG emissions factors.

For relevant dairy, sugar, oils and fats, and emulsifiers ingredients, the model differentiates between countries of origin, or between specific suppliers, or between conventional, organic, and volumes which are sustainably certified. LUC impacts are considered for dairy, sugar, oil and emulsifier ingredients where relevant.

92% of the total volume of ingredients is linked to specific datasets; 2% of the total volume of ingredients uses estimated GHG emission factors; for the remaining 6% of the total volume of ingredients, GHG

emissions factors are extrapolated from factors for other ingredients in the same subgroup.

Sources for emissions factors are the WFLDB for dairy, sugar, and oils and fats, and Ecoinvent version 3.4 for rest of the ingredients.

### **3. Transport**

For transporting cocoa and chocolate, Barry Callebaut has developed a refined tool for calculating the carbon footprint of cocoa and chocolate transportation. It combines specific data on distances, transported volumes, transport modes (ship, truck type, liquid / solid, standard / solid cooled), and payload utilization of trucks, with GHG emissions factors which are calculated for each specific transport situation.

Furthermore, the Company uses a “transport coefficient model”, which allows the calculation of GHG emissions factors for each specific truck transport situation, linked to truck size, actual payload utilization, and share of empty trips. Emissions factors are calculated for standard, heated and cooled trucks. The transport coefficient model also lists GHG emissions factors for train transports and ship transports. Emission factors from Ecoinvent version 3.4 are used for the calculation.

For transportation of cocoa beans and non-cocoa ingredients, Barry Callebaut uses annual sourced volumes, and for cocoa beans also refers to the mix of origin countries.

### **4. Operation of cocoa factories, chocolate factories and specialty factories**

Carbon footprint represents the energy consumption of factories for cocoa processing, chocolate production and specialty production). Supplier-specific electricity mixes are considered where available; otherwise a country mix is applied for all factories. Energy elements considered for the carbon footprint calculation are collected on a factory level and include electricity (non-renewable and renewable sources), fuel, gas, steam, heat and water.

Barry Callebaut uses a list of standard emissions factors for energy use in all factories. The reference databases are Ecoinvent version 3.4 and IEA 2016

		<p>(International Energy Agency). A value of 3.66 kg CO<sub>2</sub>e / kg cocoa beans is used as a global proxy for all cocoa beans processed.</p> <p><b><u>5. Packaging and offices</u></b></p> <p>Packaging and offices make up the residual balance of Barry Callebaut's CO<sub>2</sub>e footprint.</p> <p><u>Packaging</u> The volume of packaging is obtained from sourced data and multiplied by the GWP obtained from Ecoinvent version 3.2.</p> <p><u>Offices</u> The office CO<sub>2</sub>e footprint consists of domestic and international flights, and office electricity and gas use based on office areas in Zurich, Chicago and Singapore. The relevant GWP is obtained from Ecoinvent version 3.2.</p> <p><b>Re-baselining</b> Barry Callebaut re-baseline figures if there is a material change in the methodology applied within the model, or if updates to the emissions factors have a material impact to the results.</p>
305-5 (2)	CO <sub>2</sub> e intensity per tonne of average products	In addition to the criteria laid out within GRI standard 305, disclosure 305-5, this indicator measures the total carbon footprint reported above, divided by the total volumes, in tonnes, of cocoa and chocolate products sold to third parties in the financial year ended 31 August 2018.
305-5 (3)	No. of factories using renewable electricity sources	In addition to the criteria laid out within GRI standard 305, disclosure 305-5, this indicator considers a factory to be using renewable electricity sources if more than 99% of electricity used comes from renewable sources (e.g. hydroelectric) as at the year ended 31 August 2018. Barry Callebaut acknowledges a residual risk of electricity consumption coming from conventional sources from the energy suppliers.
307-1	No. of significant fines or non-monetary sanctions (PY zero)	In addition to the criteria laid out within GRI standard 307, disclosure 307-1, the term 'significant fines' here relates to any fines incurred by Barry Callebaut, which is greater than CHF 100,000.
308-2 (1)	% of cocoa sustainably sourced	In addition to the criteria laid out within GRI standard 308, disclosure 308-2, this indicator measures the proportion of sustainably sourced cocoa over total volume of cocoa sourced during the year ended 31 August 2018.

		<p>Sustainably sourced cocoa is considered that which is purchased from certified or verified sustainable sources.</p> <p>Cocoa certifications considered “sustainable” in this context are Rain Forest Alliance, UTZ, Fair Trade, Fair for Life, Cocoa Horizons, Organic and any combination of those.</p>
308-2 (2)	% of non-cocoa agricultural materials sustainably sourced	<p>In addition to the criteria laid out within GRI standard 308, disclosure 308-2, the % is calculated as certified sustainable volume over total volume of non-cocoa ingredients sourced* during the year ended 31 August 2018.</p> <p>*Due to limitations in the internal reporting system at Barry Callebaut, sales volumes of these raw materials, used as constituents of chocolate products in the year ended 31 August 2018, are used as a proxy for sourcing volumes.</p> <p>All non-cocoa raw materials are based on agricultural materials sourced for chocolate production. Ingredients include beet sugar, cane sugar, dairy, palm oil, soy and soy lecithin, vanilla, coconut oil, hazelnuts and other similar ingredients.</p> <p>Sustainably sourced non-cocoa raw materials are considered that which are purchased from certified or verified sustainable sources from external sustainability certification schemes such as Bonsucro, Fairtrade, Rainforest Alliance and RSPO, as well as Barry Callebaut's own program with Prova.</p>
308-2 (3)	% of raw materials sustainably sourced	<p>In addition to the criteria laid out within GRI standard 308, disclosure 308-2, the % agricultural raw materials is calculated as the combination of sustainably sourced cocoa and non-cocoa ingredients over total volume of cocoa and non-cocoa ingredients, as detailed above.</p>
401-1 (1)	No. of hired new employees; split by age, gender and region	<p>This indicator has been prepared with reference to the requirements laid out in the GRI standard 401, disclosure 401-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a></p>
401-1 (2)	Total employee turnover; split by age, gender and region	<p>This indicator has been prepared with reference to the requirements laid out in the GRI standard 401, disclosure 401-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a></p>
403-2 (1)	No. of incidents per 100 FTEs	<p>In addition to the criteria laid out within GRI standard 403, disclosure 403-2, the term 'incidents' in this indicator refers to an incident at work, in the year ended 31 August 2018, whereby the employee is</p>



		unable to return to work the following day and excludes occupational disease.
403-2 (2)	Lost day rate per 100 FTEs	<p>In addition to the criteria laid out within GRI standard 403, disclosure 403-2, the term 'lost days' in this indicator refers to the number of lost days in the year ended 31 August 2018, due to working incidents with at least 1 lost day as a consequence. This measure excludes occupational diseases.</p> <p>In calculating this rate, the number of lost days due to incidents related to interim or temporary labor employees includes all lost days even it goes beyond their contractual period.</p>
403-2 (3)	Absentee rate %	<p>In addition to the criteria laid out within GRI standard 403, disclosure 403-2, this indicator reports on the absenteeism rate for Barry Callebaut's operation and supply chain employees.</p> <p>This has been calculated by taking the total number of absent days divided by the total number of working days* across all Barry Callebaut's entities and operations.</p> <p>*Working days is calculated as total headcount multiplied by theoretical working days, which is working days in the month excluding public holidays and collective closed days.</p>
403-2 (4)	No. of work related fatalities	This indicator has been prepared with reference to the requirements laid out in the GRI standard 403, disclosure 403-2, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
404-2 (1)	No. of employees took part in one of Barry Callebaut's Marbach talent and management development programs	This indicator has been prepared with reference to the requirements laid out in the GRI standard 404, disclosure 404-2, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
404-2 (2)	No. of college graduates completed Barry Callebaut's two-year Graduate Trainee Program Yourfuture@BC.	This indicator has been prepared with reference to the requirements laid out in the GRI standard 404, disclosure 404-2, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
405-1	<ol style="list-style-type: none"> <li>1) No. of board of director members; split by gender and age.</li> <li>2) No. of executive committee members; split by gender and age</li> <li>3) Split of employee function by gender</li> <li>4) Split of employee function by age</li> </ol>	This indicator has been prepared with reference to the requirements laid out in the GRI standard 405, disclosure 405-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>

408-1 (1)	No. of cooperatives where CLMRS is conducted	<p>In addition to the criteria laid out within GRI standard 408, disclosure 408-1, this indicator refers to the number of Farmer Groups covered by child labor monitoring and remediation activities implemented by Barry Callebaut.</p>
408-1 (2)	No. of farmers who have had CLMRS interviews	<p>In addition to the criteria laid out within GRI standard 408, disclosure 408-1, this indicator refers to the number of farmer households which participated in survey interviews, in the year ended 31 August 2018, as part of the household surveys covered by child labor monitoring and remediation activities.</p> <p>This indicator was calculated using the data collected from Farmer Groups, which are part of Barry Callebaut's CLMRS program.</p>
408-1 (3)	No. of child labor cases identified	<p>In addition to the criteria laid out within GRI standard 408, disclosure 408-1, this indicator relates to the number of instances of child labor identified as part of CLMRS interviews in the year ended 31 August 2018.</p> <p>In alignment with the International Labor Organization, child labor is work that deprives children of their childhood, their potential and their dignity, interferes with their schooling and is harmful to physical and mental development. The Child Labor Monitoring Remediation System ("CLMRS") is a system consisting of a database supported by data collection and survey applications for use on tablets and mobile phones. This indicator explores the use of the data collection and survey functionality of the CLMRS with Members of Farmer Groups in the year ended 31 August 2018.</p> <p>In using this functionality, farmers and members of their households were surveyed regarding the number of children aged between 5 and 17 residing in the household. Where such children were identified, they were individually surveyed regarding their role on the farm, and observation visits were subsequently performed at related farms.</p> <p>As part of these interviews with children and observations regarding their role on the farm, a number of children were identified as performing tasks considered to be dangerous. Such instances have been recorded within the "child labor cases identified".</p> <p>The definitions of "child labor cases identified" in this indication have been taken from the International Labour Organization (ILO). The different categories of</p>

		<p>child labor as described by ILO can be inferred below:</p> <ul style="list-style-type: none"> <li>● 'Heavy child labor'. These are tasks considered to be dangerous, such as the handling of heavy equipment or use of farming chemicals. These are classed as a "child labor case identified" for children of all ages.</li> <li>● 'Light child labor'. These are tasks which are less dangerous but can still be hazardous, such as weeding with a machete or removing beans from cocoa pods broken by adults. These are classed as a "child labor case identified" for all children under the age of 13 years old, and for children of ages from 13 to 17 years old depending on the number of hours they have been performing these tasks per week.</li> </ul> <p>Additionally, this indicator includes child labor cases identified in Farmer Groups which are part of Barry Callebaut's Child Labor Monitoring and Remediation (CLMRS) program as well as child labor cases identified in Farmer Groups, which are not part of the CLMRS program but have been surveyed by Barry Callebaut's external surveyors.</p> <p>There have been no child labor remediation activities in the year ended 31 August 2018.</p>
408-1 (4)	<p>% of the farmer groups we directly source from that have systems in place to prevent, monitor and remediate child labor</p>	<p>In addition to the criteria laid out within GRI standard 408, disclosure 408-1, this indicator relates to the proportion of Farmer Groups, from which Barry Callebaut directly source, that have systems in place to prevent, monitor and remediate child labor.</p> <p>This includes Farmer Groups, which are part of Barry Callebaut's Child Labor Monitoring and Remediation (CLMRS) program, as well as Farmer Groups, which are not part of CLMRS but have been surveyed by Barry Callebaut's external surveyors to verify if they have systems in place to prevent, monitor and remediate child labor.</p> <p>'System' is defined as Child Protection Committee (CPC) or Child Labor Monitoring and Reporting System (CLMRS). The applicable definition of a robust and functioning system is in accordance with the CocoaAction methodology developed by the World Cocoa Foundation:</p> <p><b>Child Protection Committee (CPC)</b></p> <ul style="list-style-type: none"> <li>- CPC exists</li> <li>- CPC meetings are regular</li> <li>- Minimum of one CPC meeting in the reporting year</li> </ul>

		<p>2017/18</p> <ul style="list-style-type: none"> <li>- Members of CPC are trained on child protection, child labor case management, child labor monitoring and remediation</li> </ul> <p><b>Child Labor Monitoring and Remediation System (CLMRS)</b></p> <ul style="list-style-type: none"> <li>- CLMRS exists</li> <li>- Data is collected and children are surveyed about their involvement in light and hazardous work</li> <li>- Individuals responsible for CLMRS are trained on child protection, child labor case management, child labor monitoring and remediation</li> <li>- Equipment for individuals responsible for CLMRS is available (e.g. awareness raising material)</li> </ul> <p>Barry Callebaut collects information on the existence of CPC and CLMRS on a Farmer Group level through a declaratory survey tailored for leaders of Farmer Groups or sections of Farmer Groups.</p>
409-1	No. of factories with Sedex Members Ethical Trade Audit	This indicator has been prepared with reference to the requirements laid out in the GRI standard 409, disclosure 409-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
415-1	1) No. of political contributions directly or indirectly	This indicator has been prepared with reference to the requirements laid out in the GRI standard 415, disclosure 415-1, which can be found on GRI's website <a href="https://www.globalreporting.org/standards/">https://www.globalreporting.org/standards/</a>
419-1	Significant fines or non-monetary sanctions for non-compliance in social and economic areas	<p>In addition to the criteria laid out within GRI standard 419, disclosure 419-1, which defines significant fines or non-monetary sanctions for non-compliance in social and economic areas, this indicator also includes non-compliance with environmental laws for the year ended 31 August 2018.</p> <p>The term 'significant fines' here relates to any fines incurred by Barry Callebaut, which is greater than CHF 100,000.</p>