

Assurance Report**To the Top Management of Arçelik A.Ş.****Executive Summary**

We, as being a global independent business services organization providing standard-based solutions in more than 140 countries, have performed an independent verification audit in respect of selected data submitted by Arçelik for their eight production plants established in six different locations and the headquarter in Turkey.

The selected data of the greenhouse gas emissions which refer to the year ended 31.12.2020, detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik A.Ş. is also responsible for the content of Arçelik A.Ş Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the greenhouse gas assertion is materially correct, and the greenhouse gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements published by the International Organization for Standardization and the principles of ISO 14065:2020.

This report, including the Opinion Statement, has been prepared for the top managers of Arçelik A.Ş, to assist their Sustainability Reports referring to the Arçelik A.Ş.'s GHG emission monitoring and control performance.



For the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the top managers of Arçelik A.Ş. for our verification audit or this assurance report.

Methodology Used for the Provision of Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Arçelik A.Ş.'s greenhouse gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Arçelik A.Ş. and checked all information submitted by Arçelik A.Ş.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.

Restrictions

The absence of a manual prepared by the national authority has led both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The

methodology and references given for the selected data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Arçelik AŞ. reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.



Begüm Yurtsever

General Manager – Operations, BSI Turkey

İstanbul, 17.06.2021

Annex 1: Arçelik A.Ş. Greenhouse Gas Emissions Inventory Summary Report, 2020

Annex 1

Arçelik A.Ş. Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Arçelik A.Ş. calculated the greenhouse gas emissions sourced by its activities according to "ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard" and shares with all its shareholders via this report.

This report is the summary of Arçelik A.Ş.'s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by 6 campuses in Turkey including production plants, storage units, administrative buildings, other facilities and the Headquarter, between 01.01.2020 - 31.12.2020.

The basis year for Arçelik A.Ş.'s Greenhouse Gas Emissions Inventory is 2020 year. Due to transition to ISO 14064-1:2018 Standard and changes in production sites, basis year of Arçelik's Greenhouse Gas Emissions Inventory has been changed from 2010 to 2019.

Arçelik A.Ş. documented the greenhouse gas emission inventory management methodology into its "GCP-16344 Greenhouse Gas Management System Procedure".

Greenhouse Gas Emissions Inventory Boundaries

Arçelik A.Ş. adopted control approach into its Greenhouse Gas Emissions Inventory, 2020.

Within this scope, 6 campuses and the Headquarter under financial and administrative control of Arçelik A.Ş. in Turkey have been included in the inventory.

Abroad campuses, warehouses, service centers and dealers are not included in the Greenhouse Gas Emission Inventory.

The boundaries of the Arçelik A.Ş. Greenhouse Gas Inventory are as follows:

- *The Headquarter (Sütlüce Campus):* There are two administrative offices.
- *Çerkezköy Campus:* There are electrical motors production plant, dryer production plant and warehouses.
- *Çerkezköy Electronics Plant Campus:* There are electronics production plant and warehouses.
- *Çayırova Campus:* There are washing machine production plant, cogeneration, administrative buildings and facilities and warehouses.
- *Bolu Campus:* There are cooking appliances production plant, WEEE Recycling Plant, other facilities and warehouse.
- *Eskişehir Campus:* There are refrigerator and compressor production plants, WEEE Recycling Plant, cogeneration and warehouses.
- *Ankara Campus:* There are dishwasher production plant and warehouse.

Greenhouse Gas Emissions and Reporting Boundaries

Arçelik A.Ş.'s greenhouse gas emissions are in 6 categories:

1. Direct GHG emissions,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by an organization,
5. Indirect GHG emissions associated with the use of products from the organization
6. Indirect GHG emissions from other sources.

1. Direct GHG emissions:

Arçelik A.Ş.'s direct greenhouse gas emissions are in three categories:

- Greenhouse gas emissions sourced by the stationary combustion,
- Greenhouse gas emissions sourced by the mobile combustion,
- Greenhouse gas emissions generated during biological wastewater treatment,
- Other direct greenhouse gas emissions.

Arçelik A.Ş.'s direct emission resources are; natural gas, diesel, fuel-oil, LPG, petrol, refrigerants, acetylene, propane, industrial oil and methane generated during biological wastewater treatment.

2. Indirect GHG emissions from imported energy:

Arçelik A.Ş.'s energy indirect emission resource is electricity. Indirect GHG emissions from imported energy can be separated in two subgroups as:

- Location-Based Emissions: It is covered the emissions emitted from electricity consumption at Arçelik A.Ş. head quarter and production plants in Turkey and calculated by using national grid emission factor.
- Market-Based Emissions: It is covered the emissions emitted from consumption of electricity generated from renewable energy sources at Arçelik A.Ş. head quarter and production plants in Turkey. GHG emission factor of renewable energy and Market-Based Emissions are verified as zero.

3. Indirect GHG emissions from transportation:

The sources of Arçelik A.Ş.'s indirect GHG emissions from transportation are;

- Business travels,
- Employee commuting,
- Domestic, import and export logistics operations of Arçelik products.

GHG emissions generated by transportation are calculated by using distance, number of travelled people and weights of transported products.

4. Indirect GHG emissions from products used by the organization:

The sources of indirect GHG emissions from products used by the organization are raw materials, materials and packages used in Arçelik's sold products. The amounts are calculated by choosing the most sold product as the reference model. The products which are taken into Arçelik's GHG inventory are washing machine, dishwasher, refrigerator, top table

refrigerator, tumble dryer, oven, hob and hood produced in Arçelik's production plants in Turkey. GHG emissions caused by used materials such as plastics, metals, dyes, chemicals and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG emissions associated with the use of products from the organization:

Indirect GHG emissions associated with the use of products from the organization are the emissions generated during use-phase of Arçelik's sold products in 10 years lifetime. Products that are taken in the scope of this GHG category are washing machine, dishwasher, refrigerator, freezer, tumble dryer, oven, hob, hood, air conditioners, Turkish coffee machine, and tea-maker that are produced in Arçelik's Turkey operations. In addition to these products, outsourced products such as hair dryer, iron, toaster, kettle, microwave oven, vacuum cleaner, electric kettle, water dispenser, and outsourced white goods which are supplied from different countries (not only from Turkey) and sold to different countries are also calculated and added to Arçelik's GHG amount.

GHG emissions generated from electricity and gas consumption of the products, and GHG emissions generated from refrigerant leakage from the product for 10 years lifetime are calculated. Energy consumption of the products are taken from energy labels. Gas capacity of refrigerators, freezers, air conditioners, and tumble dryers are used to calculate GHG emissions from refrigerant leakage.

Country specific electricity emission factors from International Energy Agency (IEA) for 90% of countries that most of the products were sold are chosen according to the customer's countries of the sold products. For the rest, the average world electricity emission factor is used.

6. Other indirect GHG emissions:

Arçelik's other greenhouse gas emissions are the emissions generated during recycling or disposal of wastes occurred in production, recycling of product packaging wastes, recycling of products as waste electrical and electronics equipment (WEEE) after 10 years life time, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone.

Transportations of wastes occurred in production, product packaging wastes and WEEE are not included into Arçelik's Greenhouse Gas Emissions Inventory.

Greenhouse Gas Emissions Inventory Calculations

Arçelik's Greenhouse Gas Emissions Inventory calculations are based on mainly "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories".

The calculation methodologies and emission factors are as follows:

- The "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- The "IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas emission sourced by mobile combustion.
- In the reporting period, electricity emission factor for Turkey in "International Energy

Agency” (2020) has been used to calculate energy indirect greenhouse gas emissions. Certificate have been obtained from the suppliers which specify that electricity which is supplied to Arçelik campuses and headquarter in Turkey has been generated from renewable energy sources.

- Electricity emission factors of different countries and average world electricity emission factor from “International Energy Agency” (2020) are used to calculate GHG emissions from use of sold products.
- “2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 3: Industrial Processes and Product Use Chapter 7: Emissions of Fluorinated Substitutes for Ozone Depleting Substances”, “2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume: 5 Waste, Chapter 6: Wastewater Treatment and Discharge”, “2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion”, “IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing”, “The World Bank - Generic Environmental Management Plan (For Refrigeration Manufacturing Sector)”, “DEFRA Conversion Factors 2020 Full Set for Advance Users”, and other literature sources are used to calculate the other direct and indirect greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.

Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the finding are managed in accordance with the “GTP-16355 Corrective and Preventive Actions Procedure”.

Opinion Restatement

Arçelik A.Ş.'s Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 5%.

Verified GHG Emissions Belonging 2020

Direct, indirect and total greenhouse gas emissions of Arçelik A.Ş.’s 6 different campus in Turkey and the HQ were verified as follows:

1. Direct GHG emissions: 43,109.00 tons CO₂ equivalent
2. Indirect GHG emissions from imported energy: 0 tons CO₂ equivalent
3. Indirect GHG emissions from transportation: 636,920.00 tons CO₂ equivalent

- 3.1. Business travel: 460,512.00 tons CO₂ equivalent
- 3.2. Employee commuting: 45,936.00 tons CO₂ equivalent
- 3.3. Domestic, import and export logistics operations of Arçelik products:
130,472.00 tons CO₂ equivalent
4. Indirect GHG emissions from products used by the organization: 1,979,159.00 tons CO₂ equivalent
5. Indirect GHG emissions associated with the use of products from the organization:
15,728,569.00 tons CO₂ equivalent
6. Indirect GHG emissions from other sources (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products): 19,345.00 tons CO₂ equivalent

Total GHG emissions: 18,407,102.00 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 18,406,982.00 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 120.00 tons CO₂ equivalent

Materiality (%): 3.0

Assurance Report**to the Top Management of Arçelik and Arctic SA,****Executive Summary**

We, as being a global independent business services organization providing standard-based solutions in more than 140 countries, have performed an independent verification audit in respect of Selected Data submitted by Arctic's Refrigerator Plant and Washing Machine Plant located in Romania.

The selected data of the Carbon Emissions which refer to the year 2020 (01.01.2020-31.12.2020), detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik A.Ş. and Arctic to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik is also responsible for the content of Arçelik Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the Greenhouse Gas assertion is materially correct, and the Greenhouse Gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases-Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements published by the International Organization for Standardization and the principles of ISO 14065:2020.

This report, including the Opinion Statement, has been prepared for the top managers of Arçelik and Arctic, to assist their Sustainability Reports referring to the Arçelik's and Arctic's carbon emission monitoring and control performance.

For the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the top managers of Arçelik and Arctic for our verification audit or this assurance report.

Methodology Used for the Verification Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals published by ISO (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Arctic's Greenhouse Gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Arctic's Refrigerator Plant in Gaesti and Washing Machine Plant in Ulmi and checked all information submitted by Arctic.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation.

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.

Restrictions

The absence of a manual prepared by the national authority has lead both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The methodology and references given for the Selected Data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Arctic reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.

Begüm Yurtsever

General Manager - Operations

İstanbul, 18.05.2021

Annex 1: Arctic Greenhouse Gas Emissions Inventory Summary Report, 2020

Annex 1

Arctic Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Arctic calculated the greenhouse gas emissions sourced by its activities according to “ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard” and shares with all its shareholders via this report.

This report is the summary of Arctic’s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by Arctic Refrigerator Plant and Arctic Washing Machine Plant including production plant and product warehouse between 01.01.2020 - 31.12.2020.

The base year for Arctic’s Greenhouse Gas Emissions Inventory is 2020 year. Due to the transition to the revised standard of ISO 14064:1-2018 and the inclusion of Ulmi Plant in the Arctic GHG Inventory, the base year of Arctic’s GHG Inventory has been changed to 2020 from 2016.

Arctic documented the greenhouse gas emission inventory management methodology into its procedure called as “PM-04 The Management of Gases Emissions with Greenhouse Effect” and Arçelik’s procedure called as "GCP-16347 Greenhouse Gas Management System Procedure".

Greenhouse Gas Emissions Inventory Boundaries

Arctic has adopted control approach for Greenhouse Gas Emissions and removals in scope of GHG Inventory-2020.

Within this scope, Direct and Indirect emission-sourced activities of Arctic’s Refrigerator Plant and Washing Machine Plant have been included in the inventory.

The boundaries of the Arctic’s GHG Inventory are as follows:

- Arctic Refrigerator Plant-Gaesti/Romania: The refrigerator, freezer production plant and product warehouse
- Arctic Washing Machine Plant-Ulmi/Romania: The washing machine production plant and product warehouse

Greenhouse Gas Emissions and Activity Boundaries

In Arctic, GHG emissions and removals are grouped into two different categories:

1. Direct emissions (Scope 1):

- Stationary combustion: GHG emissions emitted from stationary sources which uses fuel (Sources: Boilers, cogeneration, generators etc. Fuels: natural gas, fuel oil, LPG etc.)
- Mobile combustion: GHG emissions emitted from mobile sources. (Sources: Forklifts, lawn-mover, personal cars etc.) (Fuels: fuel oil, diesel etc.)
- Other direct emissions: GHG emissions emitted from other than mobile and stationary

sources (refrigerants, chemicals, fire extinguishers and gases)

- Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant (for only Ulmi plant)

2. Indirect emissions: GHG emission that is a consequence of Arctic's operations and activities, but that arises from GHG sources that are now owned or controlled by Arctic. These emissions occur generally in the upstream and/or downstream chain.

2.1. Indirect Emissions from Imported Energy (Scope 2):

GHG emissions emitted from purchased electricity, heat, or steam, and GHG emissions released from renewable energy production units such as Photovoltaic Solar Units.

2.2. Significant Indirect Emissions (Scope 3):

GHG emissions emitted from sources that are not owned by the company. They are quantified and reported complying with the significance criteria set by Arçelik as defined in the below.

- The magnitude/volume of the emissions,
- The level of influence on sources/sinks,
- The Access to information,
- The level of accuracy of associated data (complexity of organization and monitoring)

Significant Indirect emissions of Arctic operations are categorized as given below.

- Indirect GHG emissions from transportation: Business travels, product logistic, employee commuting,
- Indirect GHG emissions from products used by the organization: purchased materials, parts, packaging parts used for production of the sold products,
- ❖ Indirect GHG emissions associated with the use of products from the organization: energy consumption and refrigerant leakage of the sold products during their use phase,
- ❖ Indirect GHG emissions from other sources: waste generated during operation activities at production plants, WEEE (waste electrical and electronic equipment) of the sold products, packaging waste of the sold products, non-anthropogenic biogenic emission released from WWTP (wastewater treatment plant).

Arctic's emission boundaries are documented in the FRM-5070 GHG Emission Boundaries Table and its emission sources are detailed with "FRM-5027: Emission Sources and Operational Boundaries Follow-Up Table".

Arctic's GHG emissions are aggregated into the following categories at the organizational level:

1. Direct GHG emissions and removals,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by the organization,
5. Indirect GHG emissions associated with the use of products from the organization,
6. Indirect GHG emissions from other sources.

1. Direct GHG Emissions and Removals

Arctic's direct GHG emissions are given as below.

- Gaesti factory
 - ✓ Stationary combustion sources: natural gas, diesel
 - ✓ Mobile combustion sources: Diesel, LPG, Patrol
 - ✓ Other Direct sources: Refrigerant gases (R134a, R407c, R404a,R600), fire extinguishers (CO₂), Acetylene, Propane
- Ulmi Factory
 - ✓ Stationary combustion sources: natural gas, diesel
 - ✓ Mobile combustion sources: Diesel, Patrol
 - ✓ Other Direct sources: Refrigerant gases (R134a, R410a), fire extinguishers (CO₂),
 - ✓ Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant at Ulmi plant

2. Indirect GHG Emissions from Imported Energy

GHG emissions emitted from purchased electricity at Gaesti and Ulmi factories are indirect emissions from imported energy.

At Ulmi Plant, the 930 kWp photovoltaic (PV) and 700 Concentrated Solar Power (CSP) plants installed in 2018. The electricity generated from photovoltaic solar panels are quantified as indirect emission source from imported energy (scope 2). Thanks to renewable energy usage at Gaesti and Ulmi factories, the market-based emission factors approach is used for the calculation of GHG emission sources from imported energy.

3. Indirect GHG Emissions from Transportation

Indirect GHG emissions from transportation includes GHG data of business travels (international-domestic), product logistic (domestic, export, import), employee commuting activities. The distance, number of trips, the quantity of passengers, the average weight of the products transported are used to calculate transportation related GHG emissions.

4. Indirect GHG Emissions from Products Used by the Organization

The sources of indirect GHG emissions from products used are raw materials, materials, parts, packages. Their consumption is calculated by choosing the most sold product as a reference model. The weights of materials of the reference model are multiplied with the total sales amount (import, export, domestic) of that product category. The products which are taken into Arctic's GHG inventory are refrigerator, freezer, washing machine produced in Arctic's production plants. GHG Emissions caused by used materials such as plastic, metals, dyes, chemicals, and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG Emissions associated with the Use of Products from the Organization

Energy consumption and refrigerant leakage of the sold products during their use phase are evaluated. The use phase period of the sold products is accepted as 10 years. All sold products amount (import, export, domestic) as sell out data are used for each product categories and included to the quantification calculation. Country Specific electricity emission factor for 90% of countries that most of the products were sold is chosen according to the customer's countries of the sold products. For the rest, the world emission factor is used. The countries where the refrigerator, washing machine, dishwasher, dryer, air conditioner and oven product groups are sold the most are examined. The emission factors of 35 countries with sales volume over 90% of these product groups are obtained by using the IEA's emission factor document for electricity. The world average emission factor value is used for the rest of the remaining 10% countries.

6. Indirect GHG emissions from other sources.

Arctic's other greenhouse emissions are the emissions emitted from the recycling process and/or disposal process of waste generated in production, recycling and/or disposal process of packaging waste of sold products, recycling and/or disposal process of waste electrical and electronics equipment (WEEE) which 10 years life time period is ended, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone. The logistic transportation activities of waste generated in production plant, product packaging waste and WEEE are not included into Arctic's GHG Inventory. The mobile combustion of the subcontractor activities in the production plant are included as other GHG sources.

Greenhouse Gas Emissions Inventory Calculations

Arctic's Greenhouse Gas Emissions Inventory calculations are based on mainly "Intergovernmental Panel on Climate Change (IPCC) 2006 and 2019 (2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories). Database for Arctic GHG Inventory are IPCC 2006, IPCC 2019, DEFRA, IEA (International Energy Agency).

The calculation methodologies and emission factors are as follows:

- ✓ The " IPCC-2019 Refinement to the IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- ✓ The " IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas



- emission sourced by the mobile combustion.
- ✓ Romania electricity emission factor is referenced from International Energy Agency (IEA) Country Electricity emission factor-2020.
 - ✓ The statement on the provision of renewable electricity that specify generated from renewable energy sources were obtained from the grid supplier.
 - ✓ Country Specific electricity emission factors for 90% of countries that most of the products were sold are obtained from IEA Country Emission Factor 2020. The world emission factor was used for the rest.
 - ✓ Defra- UK Government GHG Conversion Factors for Company Reporting 2020, IPCC 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7: ODS Substitutes , Volume 2 Energy Chapter 2: Stationary Combustion, IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing are used to calculate the other direct greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

GHG Protocol Uncertainty tool was used for Arctic's uncertainty calculation.

If calibration certificate of measurement devices can not be found, uncertainty analysis is done considering highest error rates defined in the related national standards. If there is no related national standard also, then IPCC Uncertainty Data is used.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.

It has been agreed that the materiality is under 5 %.

Arctic Total Uncertainty is $\pm 1,8\%$.

Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the finding are managed in accordance with the "GTP-16355 Corrective and Preventive Actions Procedure".

Opinion Restatement

Arctic's Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 5 %.

Verified GHG Emissions for the Reporting Period of 2020

Direct and Indirect GHG emissions verified of Arctic were as follows:

1. **Direct GHG emissions:** 8,125 tons CO₂ equivalent
2. **Indirect GHG emissions from imported energy:** 0 tons CO₂ equivalent
3. **Indirect GHG emissions from transportation:** 35,025 tons CO₂ equivalent
 - 3.1. Business travel: 28 tons CO₂ equivalent
 - 3.2. Employee Commuting: 8,203 tons CO₂ equivalent
 - 3.3. Product logistics (Domestic, import and export logistics operations of the sold products): 26,794 tons CO₂ equivalent
4. **Indirect GHG emissions from purchased goods used by the organization:** 371,054 tons CO₂ equivalent
5. **Indirect GHG emissions associated with the use of sold products:** 2,215,202 tons CO₂ equivalent
6. **Indirect GHG emissions from other sources** (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products) : 3,323 tons CO₂ equivalent

Total GHG emissions: 62,632,729 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 2,632,726 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 3 tons CO₂ equivalent

Cumulative Uncertainty Value: ± 1,8%.

Materiality level: 5%.

Assurance Report**to the Top Management of Arçelik and Beko LLC,****Executive Summary**

We, as being a global independent business services organization providing standard-based solutions in more than 140 countries, have performed an independent verification audit in respect of Selected Data submitted by Beko LLC's Refrigerator Plant and Washing Machine Plant located in Russia.

The selected data of the Carbon Emissions which refer to the year 2020 (01.01.2020-31.12.2020), detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik A.Ş. and Beko LLC to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik is also responsible for the content of Arçelik Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the Greenhouse Gas assertion is materially correct, and the Greenhouse Gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases-Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements published by the International Organization for Standardization and the principles of ISO 14065:2020.

This report, including the Opinion Statement, has been prepared for the top managers of Arçelik and Beko LLC, to assist their Sustainability Reports referring to the Arçelik's and Beko LLC's carbon emission monitoring and control performance.

For the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the top managers of Arçelik and Beko LLC for our verification audit or this assurance report.

Methodology Used for the Verification Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals published by ISO (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Beko LLC's Greenhouse Gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Beko LLC's Refrigerator Plant and Washing Machine Plant in Kirzhach, Russia and checked all information submitted by Beko LLC.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation.

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.

Restrictions

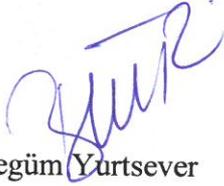
The absence of a manual prepared by the national authority has lead both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The methodology and references given for the Selected Data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Beko LLC reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.



Begüm Yurtsever

General Manager - Operations

İstanbul, 18.05.2021

Annex 1: Beko LLC Greenhouse Gas Emissions Inventory Summary Report, 2020

Annex 1

Beko LLC Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Beko LLC calculated the greenhouse gas emissions sourced by its activities according to “ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard” and shares with all its shareholders via this report.

This report is the summary of Beko LLC’s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by Beko LLC Refrigerator Plant and Washing Machine Plant including production plant and product warehouse between 01.01.2020 - 31.12.2020.

The base year for Beko LLC’s Greenhouse Gas Emissions Inventory is 2020 year. Due to the transition to the revised standard of ISO 14064:1-2018, the base year of Beko LLC’s GHG Inventory has been changed to 2020 from 2016.

Beko LLC documented the greenhouse gas emission inventory management methodology into its procedure called as “GEP-047 GHG Emissions Inventory” and Arçelik’s procedure called as "GCP-16347 Greenhouse Gas Management System Procedure".

Greenhouse Gas Emissions Inventory Boundaries

Beko LLC has adopted control approach for Greenhouse Gas Emissions and removals in scope of GHG Inventory-2020.

Within this scope, Direct and Indirect emission-sourced activities of Beko LLC’s Refrigerator Plant and Washing Machine Plant have been included in the inventory.

The boundaries of the Beko LLC’s GHG Inventory are as follows:

- Beko LLC Refrigerator & Washing Machine Plant-Kirzach/Russia: The refrigerator, freezer, washing machine production plant and product warehouse

Greenhouse Gas Emissions and Activity Boundaries

In Beko LLC, GHG emissions and removals are grouped into two different categories:

1. Direct emissions (Scope 1):

- Stationary combustion: GHG emissions emitted from stationary sources which uses fuel (Sources: Boilers, cogeneration, generators etc. Fuels: natural gas, fuel oil, LPG etc.)
- Mobile combustion: GHG emissions emitted from mobile sources. (Sources: Forklifts, lawn-mover, personal cars etc.) (Fuels: fuel oil, diesel etc.)
- Other direct emissions: GHG emissions emitted from other than mobile and stationary sources (refrigerants, chemicals, fire extinguishers and gases)
- Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant

2. Indirect emissions: GHG emission that is a consequence of Beko LLC’s operations

and activities, but that arises from GHG sources that are now owned or controlled by Beko LLC. These emissions occur generally in the upstream and/or downstream chain.

2.1. Indirect Emissions from Imported Energy (Scope 2):

GHG emissions emitted from purchased electricity, heat, or steam.

2.2. Significant Indirect Emissions (Scope 3):

GHG emissions emitted from sources that are not owned by the company. They are quantified and reported complying with the significance criteria set by Arçelik as defined in the below.

- The magnitude/volume of the emissions,
- The level of influence on sources/sinks,
- The Access to information,
- The level of accuracy of associated data (complexity of organization and monitoring)

Significant Indirect emissions of Beko LLC operations are categorized as given below.

- Indirect GHG emissions from transportation: Business travels, product logistic, employee commuting,
- Indirect GHG emissions from products used by the organization: purchased materials, parts, packaging parts used for production of the sold products,
- ❖ Indirect GHG emissions associated with the use of products from the organization: energy consumption and refrigerant leakage of the sold products during their use phase,
- ❖ Indirect GHG emissions from other sources: waste generated during operation activities at production plants, WEEE (waste electrical and electronic equipment) of the sold products, packaging waste of the sold products, non-anthropogenic biogenic emission released from WWTP (wastewater treatment plant).

Beko LLC's emission boundaries are documented in the FRM-5070 GHG Emission Boundaries Table and its emission sources are detailed with "FRM-5027: Emission Sources and Operational Boundaries Follow-Up Table".

Beko LLC's GHG emissions are aggregated into the following categories at the organizational level:

1. Direct GHG emissions and removals,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by the organization,
5. Indirect GHG emissions associated with the use of products from the organization,
6. Indirect GHG emissions from other sources.



1. Direct GHG Emissions and Removals

Beko LLC's direct GHG emissions are given as below.

- ✓ Stationary combustion sources: Natural gas, Diesel
- ✓ Mobile combustion sources: Diesel, LPG, Patrol
- ✓ Other Direct sources: Refrigerant gases (R410a), Acetylene, Propane
- ✓ Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant at Beko LLC plant

2. Indirect GHG Emissions from Imported Energy

GHG emissions emitted from purchased electricity at Beko LLC are indirect emissions from imported energy.

The location-based emission factors approach is used for the calculation of GHG emission sources from imported energy.

3. Indirect GHG Emissions from Transportation

Indirect GHG emissions from transportation includes GHG data of business travels (international-domestic), product logistic (domestic, export, import), employee commuting activities. The distance, number of trips, the quantity of passengers, the average weight of the products transported are used to calculate transportation related GHG emissions.

4. Indirect GHG Emissions from Products Used by the Organization

The sources of indirect GHG emissions from products used are raw materials, materials, parts, packages. Their consumption is calculated by choosing the most sold product as a reference model. The weights of materials of the reference model are multiplied with the total sales amount (import, export, domestic) of that product category. The products which are taken into Beko LLC's GHG inventory are refrigerator, freezer, washing machine produced in Beko LLC's production plants. GHG Emissions caused by used materials such as plastic, metals, dyes, chemicals, and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG Emissions associated with the Use of Products from the Organization

Energy consumption and refrigerant leakage of the sold products during their use phase are evaluated. The use phase period of the sold products is accepted as 10 years. All sold products amount (import, export, domestic) as sell out data are used for each product categories and included to the quantification calculation. Country Specific electricity emission factor for 90% of countries that most of the products were sold is chosen according to the customer's countries of the sold products. For the rest, the world emission factor is used. The countries where the refrigerator, washing machine, dishwasher, dryer, air conditioner and oven product groups are sold the most are examined. The emission factors of 35 countries with sales volume over 90% of these product groups are obtained by using the IEA's emission factor document for electricity. The world average emission factor value is used for the rest of the remaining 10% countries.

6. Indirect GHG emissions from other sources.

Beko LLC's other greenhouse emissions are the emissions emitted from the recycling process and/or disposal process of waste generated in production, recycling and/or disposal process of packaging waste of sold products, recycling and/or disposal process of waste electrical and electronics equipment (WEEE) which 10 years life time period is ended, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone. The logistic transportation activities of waste generated in production plant, product packaging waste and WEEE are not included into Beko LLC's GHG Inventory. The mobile combustion of the subcontractor activities in the production plant are included as other GHG sources.

Greenhouse Gas Emissions Inventory Calculations

Beko LLC's Greenhouse Gas Emissions Inventory calculations are based on mainly Intergovernmental Panel on Climate Change (IPCC) 2006 and 2019 (2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories). Database for Beko LLC GHG Inventory are IPCC 2006, IPCC 2019, DEFRA, IEA (International Energy Agency).

The calculation methodologies and emission factors are as follows:

- ✓ The " IPCC-2019 Refinement to the IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- ✓ The " IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas emission sourced by the mobile combustion.
- ✓ Country Specific electricity emission factors for 90% of countries that most of the products were sold are obtained from IEA Country Emission Factor 2020. The world emission factor was used for the rest.
- ✓ Defra- UK Government GHG Conversion Factors for Company Reporting 2020, IPCC 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7: ODS Substitutes , Volume 2 Energy Chapter 2: Stationary Combustion, IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing are used to calculate the other direct greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

GHG Protocol Uncertainty tool was used for Beko LLC's uncertainty calculation. If calibration certificate of measurement devices can not be found, uncertainty analysis is done considering highest error rates defined in the related national standards. If there is no related national standard also, then IPCC Uncertainty Data is used.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.



It has been agreed that the materiality is under 7 %.

Beko LLC Total Uncertainty is $\pm 3.4\%$.

Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the finding are managed in accordance with the "GTP-16355 Corrective and Preventive Actions Procedure".

Opinion Restatement

Beko LLC's Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 7 %.

Verified GHG Emissions for the Reporting Period of 2020

Direct and Indirect GHG emissions verified of Beko LLC were as follows:

1. **Direct GHG emissions:** 8,604 tons CO₂ equivalent
2. **Indirect GHG emissions from imported energy:** 7,597 tons CO₂ equivalent
3. **Indirect GHG emissions from transportation:** 122,900 tons CO₂ equivalent
 - 3.1. Business travel: 102 tons CO₂ equivalent
 - 3.2. Employee Commuting: 4,845 tons CO₂ equivalent
 - 3.3. Product logistics (Domestic, import and export logistics operations of the sold products): 117,953 tons CO₂ equivalent
4. **Indirect GHG emissions from purchased goods used by the organization:** 119,040 tons CO₂ equivalent
5. **Indirect GHG emissions associated with the use of sold products:** 829,572 tons CO₂ equivalent
6. **Indirect GHG emissions from other sources** (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products) : 733 tons CO₂ equivalent

Total GHG emissions: 1,088,446 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 1,088,445 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 1 tons CO₂ equivalent

Cumulative Uncertainty Value: $\pm 3.4\%$.

Materiality level: 7%.



Assurance Report**to the Top Management of Arçelik and Beko Thai,****Executive Summary**

We, as being a global independent business services organization providing standard-based solutions in more than 140 countries, have performed an independent verification audit in respect of Selected Data submitted by Beko Thai's Refrigerator Plant located in Thailand.

The selected data of the Carbon Emissions which refer to the year 2020 (01.01.2020-31.12.2020), detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik A.Ş. and Beko Thai to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik is also responsible for the content of Arçelik Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the Greenhouse Gas assertion is materially correct, and the Greenhouse Gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases-Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements published by the International Organization for Standardization and the principles of ISO 14065:2020.



This report, including the Opinion Statement, has been prepared for the top managers of Arçelik and Beko Thai, to assist their Sustainability Reports referring to the Arçelik's and Beko Thai's carbon emission monitoring and control performance.

For the fullest extent permitted by law, we do not accept or assume responsibility to any one other than the top managers of Arçelik and Beko Thai for our verification audit or this assurance report.

Methodology Used for the Verification Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals published by ISO (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Beko Thai's Greenhouse Gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Beko Thai's Refrigerator Plant in Rayong, and checked all information submitted by Beko Thai.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation.

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.



Restrictions

The absence of a manual prepared by the national authority has lead both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The methodology and references given for the Selected Data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Beko Thai reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.

Begüm Yurtsever

General Manager - Operations

İstanbul, 18.05.2021

Annex 1

Beko Thai Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Beko Thai calculated the greenhouse gas emissions sourced by its activities according to “ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard” and shares with all its shareholders via this report.

This report is the summary of Beko Thai’s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by Beko Thai Refrigerator Plant including production plant and product warehouse between 01.01.2020 - 31.12.2020.

The base year for Beko Thai’s Greenhouse Gas Emissions Inventory is 2020 year.

Beko Thai documented the greenhouse gas emission inventory management methodology into its procedure called as “TP-TH-SHE-032 GHG Emissions Inventory” and Arçelik’s procedure called as "GCP-16347 Greenhouse Gas Management System Procedure".

Greenhouse Gas Emissions Inventory Boundaries

Beko Thai has adopted control approach for Greenhouse Gas Emissions and removals in scope of GHG Inventory-2020.

Within this scope, Direct and Indirect emission-sourced activities of Beko Thai’s Refrigerator Plant have been included in the inventory.

The boundaries of the Beko Thai’s GHG Inventory are as follows:

- Beko Thai Refrigerator Plant-Rayong/Thailans: The refrigerator, freezer production plant and product warehouse

Greenhouse Gas Emissions and Activity Boundaries

In Beko Thai, GHG emissions and removals are grouped into two different categories:

1. Direct emissions (Scope 1):

- Stationary combustion: GHG emissions emitted from stationary sources which uses fuel (Sources: Boilers, cogeneration, generators etc. Fuels: natural gas, fuel oil, LPG etc.)
- Mobile combustion: GHG emissions emitted from mobile sources. (Sources: Forklifts, lawn-mover, personal cars etc.) (Fuels: fuel oil, diesel etc.)
- Other direct emissions: GHG emissions emitted from other than mobile and stationary sources (refrigerants, chemicals, fire extinguishers and gases)
- Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant

2. **Indirect emissions:** GHG emission that is a consequence of Beko Thai’s operations and activities, but that arises from GHG sources that are now owned or controlled by Beko Thai. These emissions occur generally in the upstream and/or downstream chain.

2.1. Indirect Emissions from Imported Energy (Scope 2):

GHG emissions emitted from purchased electricity, heat, or steam.

2.2. Significant Indirect Emissions (Scope 3):

GHG emissions emitted from sources that are not owned by the company. They are quantified and reported complying with the significance criteria set by Arçelik as defined in the below;

- The magnitude/volume of the emissions,
- The level of influence on sources/sinks,
- The Access to information,
- The level of accuracy of associated data (complexity of organization and monitoring)

Significant Indirect emissions of Beko Thai operations are categorized as given below.

- Indirect GHG emissions from transportation: Business travels, product logistic, employee commuting,
- Indirect GHG emissions from products used by the organization: purchased materials, parts, packaging parts used for production of the sold products,
- ❖ Indirect GHG emissions associated with the use of products from the organization: energy consumption and refrigerant leakage of the sold products during their use phase,
- ❖ Indirect GHG emissions from other sources: waste generated during operation activities at production plants, WEEE (waste electrical and electronic equipment) of the sold products, packaging waste of the sold products, non-anthropogenic biogenic emission released from WWTP (wastewater treatment plant).

Beko Thai's emission boundaries are documented in the FRM-5070 GHG Emission Boundaries Table and its emission sources are detailed with "FRM-5027: Emission Sources and Operational Boundaries Follow-Up Table".

Beko Thai's GHG emissions are aggregated into the following categories at the organizational level:

1. Direct GHG emissions and removals,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by the organization,
5. Indirect GHG emissions associated with the use of products from the organization,
6. Indirect GHG emissions from other sources.



1. Direct GHG Emissions and Removals

Beko Thai's direct GHG emissions are given as below.

- ✓ Stationary combustion sources: LPG, Diesel
- ✓ Mobile combustion sources: Diesel, LPG, Patrol
- ✓ Other Direct sources: Refrigerant gases (R32, R134a, R407c, R404a, R410a, R600), fire extinguishers (CO₂), Acetylene,

2. Indirect GHG Emissions from Imported Energy

GHG emissions emitted from purchased electricity at Beko Thai are indirect emissions from imported energy.

The location-based emission factors approach is used for the calculation of GHG emission sources from imported energy.

3. Indirect GHG Emissions from Transportation

Indirect GHG emissions from transportation includes GHG data of business travels (international-domestic), product logistic (domestic, export, import), employee commuting activities. The distance, number of trips, the quantity of passengers, the average weight of the products transported are used to calculate transportation related GHG emissions.

4. Indirect GHG Emissions from Products Used by the Organization

The sources of indirect GHG emissions from products used are raw materials, materials, parts, packages. Their consumption is calculated by choosing the most sold product as a reference model. The weights of materials of the reference model are multiplied with the total sales amount (import, export, domestic) of that product category. The products which are taken into Beko Thai's GHG inventory are refrigerators produced in Beko Thai's production plants. GHG Emissions caused by used materials such as plastic, metals, dyes, chemicals, and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG Emissions associated with the Use of Products from the Organization

Energy consumption and refrigerant leakage of the sold products during their use phase are evaluated. The use phase period of the sold products is accepted as 10 years. All sold products amount (import, export, domestic) as sell out data are used for each product categories and included to the quantification calculation. Country Specific electricity emission factor for 90% of countries that most of the products were sold is chosen according to the customer's countries of the sold products. For the rest, the world emission factor is used. The countries where the refrigerator, washing machine, dishwasher, dryer, air conditioner and oven product groups are sold the most are examined. The emission factors of 35 countries with sales volume over 90% of these product groups are obtained by using the IEA's emission factor document for electricity. The world average emission factor value is used for the rest of the remaining 10% countries.

6. Indirect GHG emissions from other sources.

Beko Thai's other greenhouse emissions are the emissions emitted from the recycling process and/or disposal process of waste generated in production, recycling and/or disposal process of packaging waste of sold products, recycling and/or disposal

process of waste electrical and electronics equipment (WEEE) which 10 years life time period is ended, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone. The logistic transportation activities of waste generated in production plant, product packaging waste and WEEE are not included into Beko Thai's GHG Inventory. The mobile combustion of the subcontractor activities in the production plant are included as other GHG sources.

Greenhouse Gas Emissions Inventory Calculations

Beko Thai's Greenhouse Gas Emissions Inventory calculations are based on mainly "Intergovernmental Panel on Climate Change (IPCC) 2006 and 2019 (2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories). Database for Beko Thai GHG Inventory are IPCC 2006, IPCC 2019, DEFRA, IEA (International Energy Agency).

The calculation methodologies and emission factors are as follows:

- ✓ The " IPCC-2019 Refinement to the IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- ✓ The " IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas emission sourced by the mobile combustion.
- ✓ Country Specific electricity emission factors for 90% of countries that most of the products were sold are obtained from IEA Country Emission Factor 2020. The world emission factor was used for the rest.
- ✓ Defra- UK Government GHG Conversion Factors for Company Reporting 2020, IPCC 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7: ODS Substitutes , Volume 2 Energy Chapter 2: Stationary Combustion, IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing are used to calculate the other direct greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

GHG Protocol Uncertainty tool was used for Beko Thai's uncertainty calculation.

If calibration certificate of measurement devices can not be found, uncertainty analysis is done considering highest error rates defined in the related national standards. If there is no related national standard also, then IPCC Uncertainty Data is used.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.

It has been agreed that the materiality is under 7 %.

Beko Thai Total Uncertainty is $\pm 2.4\%$.



Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the findings are managed in accordance with the “GTP-16355 Corrective and Preventive Actions Procedure”.

Opinion Restatement

Beko Thai’s Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 7 %.

Verified GHG Emissions for the Reporting Period of 2020

Direct and Indirect GHG emissions verified of Beko Thai were as follows:

1. **Direct GHG emissions:** 549 tons CO₂ equivalent
2. **Indirect GHG emissions from imported energy:** 4,201 tons CO₂ equivalent
3. **Indirect GHG emissions from transportation:** 5,280 tons CO₂ equivalent
 - 3.1. Business travel: 31 tons CO₂ equivalent
 - 3.2. Employee Commuting: 2,332 tons CO₂ equivalent
 - 3.3. Product logistics (Domestic, import and export logistics operations of the sold products): 2,917 tons CO₂ equivalent
4. **Indirect GHG emissions from purchased goods used by the organization:** 23,782 tons CO₂ equivalent
5. **Indirect GHG emissions associated with the use of sold products:** 304,574 tons CO₂ equivalent
6. **Indirect GHG emissions from other sources** (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products): 937 tons CO₂ equivalent

Total GHG emissions: 339,323 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 339,321 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 2 tons CO₂ equivalent

Cumulative Uncertainty Value: ± 2.4%.

Materiality level: 7%.



Assurance Report**to the Top Management of Arçelik and Dawlance,****Executive Summary**

We, as being a global independent business services organization providing standard-based solutions in more than 140 countries, have performed an independent verification audit in respect of Selected Data submitted by Dawlance's production plants as DPL1, DPL2,URIL located in Pakistan.

The selected data of the Carbon Emissions which refer to the year 2020 (01.01.2020-31.12.2020, detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik A.Ş. and Dawlance to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik is also responsible for the content of Arçelik Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the Greenhouse Gas assertion is materially correct, and the Greenhouse Gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases-Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements published by the International Organization for Standardization and the principles of ISO 14065:2020.

This report, including the Opinion Statement, has been prepared for the top managers of Arçelik and Dawlance, to assist their Sustainability Reports referring to the Arçelik's and Dawlance's carbon emission monitoring and control performance.

For the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the top managers of Arçelik and Dawlance for our verification audit or this assurance report.

Methodology Used for the Verification Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals published by ISO (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Dawlance's Greenhouse Gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Dawlance's production plants, DPL1 and DPL2 in Karachi, and URIL in Hyderabad, and checked all information submitted by Dawlance.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation.

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.



Restrictions

The absence of a manual prepared by the national authority has lead both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The methodology and references given for the Selected Data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Dawlance reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.

Begüm Yurtsever

General Manager - Operations

İstanbul, 18.05.2021

Annex 1: Dawlance Greenhouse Gas Emissions Inventory Summary Report, 2020

Annex 1

Dawlance Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Dawlance calculated the greenhouse gas emissions sourced by its activities according to “ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard” and shares with all its shareholders via this report.

This report is the summary of Dawlance’s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by Dawlance DPL1, DPL2, URIL factories including production plant and product warehouse between 01.01.2020 - 31.12.2020.

The base year for Dawlance’s Greenhouse Gas Emissions Inventory is 2020 year. Due to the transition to the revised standard of ISO 14064:1-2018, the base year of Dawlance’s GHG Inventory has been changed to 2020 from 2019.

Dawlance documented the greenhouse gas emission inventory management methodology into its procedure called as “DGC-GHG/EI-001 GHG Emissions Inventory” and Arçelik’s procedure called as "GCP-16347 Greenhouse Gas Management System Procedure".

Greenhouse Gas Emissions Inventory Boundaries

Dawlance has adopted control approach for Greenhouse Gas Emissions and removals in scope of GHG Inventory-2020.

Within this scope, Direct and Indirect emission-sourced activities of Dawlance have been included in the inventory.

The boundaries of the Dawlance’s GHG Inventory are as follows:

- DPL1- Karachi/Pakistan: The refrigerator production plant and product warehouse
- DPL2 - Karachi/Pakistan: The washing machine, air conditioner, microwave, water dispenser production plant and product warehouse
- URIL – Hyderabad/Pakistan: The refrigerator, freezer production plant and product warehouse

Greenhouse Gas Emissions and Activity Boundaries

In Dawlance, GHG emissions and removals are grouped into two different categories:

1. Direct emissions (Scope 1):

- Stationary combustion: GHG emissions emitted from stationary sources which uses fuel (Sources: Boilers, cogeneration, generators etc. Fuels: natural gas, fuel oil, LPG etc.)
- Mobile combustion: GHG emissions emitted from mobile sources. (Sources: Forklifts, lawn-mover, personal cars etc.) (Fuels: fuel oil, diesel etc.)
- Other direct emissions: GHG emissions emitted from other than mobile and stationary sources (refrigerants, chemicals, fire extinguishers and gases)

- Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant
- 2. Indirect emissions:** GHG emission that is a consequence of Dawlance's operations and activities, but that arises from GHG sources that are now owned or controlled by Dawlance. These emissions occur generally in the upstream and/or downstream chain.

2.1. Indirect Emissions from Imported Energy (Scope 2):

GHG emissions emitted from purchased electricity, heat, or steam.

2.2. Significant Indirect Emissions (Scope 3):

GHG emissions emitted from sources that are not owned by the company. They are quantified and reported complying with the significance criteria set by Arçelik as defined in the below.

- The magnitude/volume of the emissions,
- The level of influence on sources/sinks,
- The Access to information,
- The level of accuracy of associated data (complexity of organization and monitoring)

Significant Indirect emissions of Dawlance operations are categorized as given below.

- Indirect GHG emissions from transportation: Business travels, product logistic, employee commuting,
- Indirect GHG emissions from products used by the organization: purchased materials, parts, packaging parts used for production of the sold products,
- ❖ Indirect GHG emissions associated with the use of products from the organization: energy consumption and refrigerant leakage of the sold products during their use phase,
- ❖ Indirect GHG emissions from other sources: waste generated during operation activities at production plants, WEEE (waste electrical and electronic equipment) of the sold products, packaging waste of the sold products, non-anthropogenic biogenic emission released from WWTP (wastewater treatment plant).

Dawlance's emission boundaries are documented in the FRM-5070 GHG Emission Boundaries Table and its emission sources are detailed with "FRM-5027: Emission Sources and Operational Boundaries Follow-Up Table".

Dawlance's GHG emissions are aggregated into the following categories at the organizational level:

1. Direct GHG emissions and removals,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by the organization,

5. Indirect GHG emissions associated with the use of products from the organization,
6. Indirect GHG emissions from other sources.

1. Direct GHG Emissions and Removals

Dawlance's direct GHG emissions are given as below.

- DPL 1 factory
 - ✓ Stationary combustion sources: natural gas, diesel, LPG
 - ✓ Mobile combustion sources: Diesel, Patrol
 - ✓ Other Direct sources: Refrigerant gases (R407c,R600), fire extinguishers (CO2), Acetylene,
- DPL 2 Factory
 - ✓ Stationary combustion sources: natural gas, diesel, LPG
 - ✓ Mobile combustion sources: Diesel, Patrol, CNG
 - ✓ Other Direct sources: Refrigerant gases (R134a, R404a R410a), fire extinguishers (CO2), Acetylene,
 - ✓ Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant at DPL2 plant
- URIL Factory
 - ✓ Stationary combustion sources: natural gas, diesel, LPG
 - ✓ Mobile combustion sources: Diesel, Patrol, CNG
 - ✓ Other Direct sources: Refrigerant gases (R134a, R407c R410a, R600a), fire extinguishers (CO2), CO2 (for welding process), Acetylene,
 - ✓ Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant at URIL plant

2. Indirect GHG Emissions from Imported Energy

GHG emissions emitted from purchased electricity at DPL 1, DPL 2, and URIL factories are indirect emissions from imported energy.

The location-based emission factors approach is used for the calculation of GHG emission sources from imported energy.

3. Indirect GHG Emissions from Transportation

Indirect GHG emissions from transportation includes GHG data of business travels (international-domestic), product logistic (domestic, export, import), employee commuting activities. The distance, number of trips, the quantity of passengers, the average weight of the products transported are used to calculate transportation related GHG emissions.



4. Indirect GHG Emissions from Products Used by the Organization

The sources of indirect GHG emissions from products used are raw materials, materials, parts, packages. Their consumption is calculated by choosing the most sold product as a reference model. The weights of materials of the reference model are multiplied with the total sales amount (import, export, domestic) of that product category. The products which are taken into Dawlance's GHG inventory are refrigerator, freezer, washing machine produced in Dawlance's production plants. GHG Emissions caused by used materials such as plastic, metals, dyes, chemicals, and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG Emissions associated with the Use of Products from the Organization

Energy consumption and refrigerant leakage of the sold products during their use phase are evaluated. The use phase period of the sold products is accepted as 10 years. All sold products amount (import, export, domestic) as sell out data are used for each product categories and included to the quantification calculation. Country Specific electricity emission factor for 90% of countries that most of the products were sold is chosen according to the customer's countries of the sold products. For the rest, the world emission factor is used. The countries where the refrigerator, washing machine, dishwasher, dryer, air conditioner and oven product groups are sold the most are examined. The emission factors of 35 countries with sales volume over 90% of these product groups are obtained by using the IEA's emission factor document for electricity. The world average emission factor value is used for the rest of the remaining 10% countries.

6. Indirect GHG emissions from other sources.

Dawlance's other greenhouse emissions are the emissions emitted from the recycling process and/or disposal process of waste generated in production, recycling and/or disposal process of packaging waste of sold products, recycling and/or disposal process of waste electrical and electronics equipment (WEEE) which 10 years life time period is ended, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone. The logistic transportation activities of waste generated in production plant, product packaging waste and WEEE are not included into Dawlance's GHG Inventory. The mobile combustion of the subcontractor activities in the production plant are included as other GHG sources.

Greenhouse Gas Emissions Inventory Calculations

Dawlance's Greenhouse Gas Emissions Inventory calculations are based on mainly "Intergovernmental Panel on Climate Change (IPCC) 2006 and 2019 (2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories)". Database for Dawlance GHG Inventory are IPCC 2006, IPCC 2019, DEFRA, IEA (International Energy Agency).

The calculation methodologies and emission factors are as follows:

- ✓ The " IPCC-2019 Refinement to the IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- ✓ The " IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2:

Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas emission sourced by the mobile combustion.

- ✓ Country Specific electricity emission factors for 90% of countries that most of the products were sold are obtained from IEA Country Emission Factor 2020. The world emission factor was used for the rest.
- ✓ Defra- UK Government GHG Conversion Factors for Company Reporting 2020, IPCC 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7: ODS Substitutes , Volume 2 Energy Chapter 2: Stationary Combustion, IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing are used to calculate the other direct greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

GHG Protocol Uncertainty tool was used for Dawlance's uncertainty calculation.

If calibration certificate of measurement devices can not be found, uncertainty analysis is done considering highest error rates defined in the related national standards. If there is no related national standard also, then IPCC Uncertainty Data is used.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.

It has been agreed that the materiality is under 7 %.

Dawlance Total Uncertainty is $\pm 4,6\%$.

Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the finding are managed in accordance with the "GTP-16355 Corrective and Preventive Actions Procedure".

Opinion Restatement

Dawlance's Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 7 %.

Verified GHG Emissions for the Reporting Period of 2020

Direct and Indirect GHG emissions verified of Dawlance were as follows:

1. **Direct GHG emissions:** 7,894 tons CO₂ equivalent
2. **Indirect GHG emissions from imported energy:** 7,388 tons CO₂ equivalent
3. **Indirect GHG emissions from transportation:** 28,859 tons CO₂ equivalent
 - 3.1. Business travel: 170 tons CO₂ equivalent
 - 3.2. Employee Commuting: 24,451 tons CO₂ equivalent
 - 3.3. Product logistics (Domestic, import and export logistics operations of the sold products): 4,238 tons CO₂ equivalent
4. **Indirect GHG emissions from purchased goods used by the organization:** 90,671 tons CO₂ equivalent
5. **Indirect GHG emissions associated with the use of sold products:** 938,074 tons CO₂ equivalent
6. **Indirect GHG emissions from other sources** (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products): 4,149 tons CO₂ equivalent

Total GHG emissions: 1,077,035 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 1,077,031 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 4 tons CO₂ equivalent

Cumulative Uncertainty Value: ± 4,6%.

Materiality level: 7%.

Assurance Report

to the Top Management of Arçelik and Defy Appliances (Pty) Ltd.,

Executive Summary

We, as being a global independent business services organization providing standard -based solutions in more than 140 countries, have performed an independent verification audit in respect of Selected Data submitted by Defy's production plants as Jacobs, Ezakhani (Site 360 and Site 180), East London located in South Africa.

The selected data of the Carbon Emissions which refer to the year 2020 (01.01.2020-31.12.2020, detailed in Annex 1 has been verified with reasonable assurance.

Respective Responsibilities

It is the responsibility of the top management of Arçelik A.Ş. and Defy to collect and prepare the necessary data for verification review with high accuracy. The top management of Arçelik is also responsible for the content of Arçelik Sustainability Reports which refers to the selected data in accordance with the criteria set out in Annex 1.

Principles of the verification service that we perform are as follows:

- Impartiality
- Competence
- Factual approach to decision making
- Openness
- Confidentiality

Our verification audit based on reasonable assurance procedures to check whether the Greenhouse Gas assertion is materially correct, and the Greenhouse Gas data and information submitted to our verification team is prepared in all material respects in accordance with Annex 1.

The assurance engagement performed is fully in compliance with the applicable independence and competency requirements as laid down in ISO14064-3:2019 Greenhouse gases-Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements published by the International Organization for Standardization and the principles of ISO 14065:2020.



This report, including the Opinion Statement, has been prepared for the top managers of Arçelik and Defy, to assist their Sustainability Reports referring to the Arçelik's and Defy's carbon emission monitoring and control performance.

For the fullest extent permitted by law, we do not accept or assume responsibility to any one other than the top managers of Arçelik and Defy for our verification audit or this assurance report.

Methodology Used for the Verification Audit

We conducted this reasonable assurance engagement in accordance with ISO14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals published by ISO (International Organization for Standardization).

A reasonable assurance engagement provides a reasonable but not absolute level of assurance that Defy's Greenhouse Gas assertion is materially corrected under ISO 14064-1:2018. In a reasonable assurance work, duration, and extent of the procedures for gathering sufficient appropriate evidence is reasonably more than a limited assurance engagement.

To perform this assurance work, we have audited Defy's production plants in Jacobs, Ezakhani, East London, and checked all information submitted by Defy.

The following were the verification activities undertaken:

- Evaluation of the monitoring and controls systems through interviewing the employees, observation, and inquiry.
- Verification of the data through the sampling, recalculation, retracing, cross checking, reconciliation.

Our reasonable assurance procedures require from the verification team to assess the followings:

- a) Inventory design, scope & boundary,
- b) Specific Greenhouse Gas (GHG) activity and technology,
- c) Identification and selection of GHG sources, sinks or reservoirs,
- d) Quantification, monitoring and reporting, including relevant technical and sector issues,
- e) Situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions.

The verifier or verification team have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect organization boundaries, including any legal requirements related to the GHG assertion.



Restrictions

The absence of a manual prepared by the national authority has lead both parties to have some assumptions especially related to the grid emission factors and some measurement and calculation techniques which can result in materially different calculations and can impact the comparability. Therefore, the accuracy of different calculations may also vary from company to company. Furthermore, the nature and the methods used to determine such information, as well as the measurement criteria and the accuracy thereof, may change overtime. The methodology and references given for the Selected Data are documented in the context of Annex 1.

Opinion Statement

Based on the results of the verification audit we delivered according to our procedures, the Greenhouse Gas assertion of Defy reported in their Sustainability Reports is materially correct and is a fair representation of the data and information and is prepared in accordance with the related international standard on Greenhouse Gas quantification, monitoring and reporting and to relevant national standards or practices available at the time verification audit performed.

BSI (British Standards Institution)

BSI Group Eurasia Belgelendirme Hizmetleri Ltd. Şti.

Begüm Yurtsever

General Manager - Operations

İstanbul, 18.05.2021



Annex 1

Defy Greenhouse Gas Emissions Inventory Summary Report, 2020

General Principles and Scope

Defy calculated the greenhouse gas emissions sourced by its activities according to “*ISO 14064-1: 2018 Greenhouse Gases, Part 1 - Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals Standard*” and shares with all its shareholders via this report.

This report is the summary of Defy’s Greenhouse Gas (GHG) Emission Report 2020, including the general principles of the calculation methodologies and the GHG management.

This inventory includes greenhouse gas emissions sourced by Defy Jacobs Plant, Ezakhani Plants (Site 360 and Site 180), East London factories including production plant and product warehouse between 01.01.2020 - 31.12.2020.

The base year for Defy’s Greenhouse Gas Emissions Inventory is 2020 year. Due to the transition to the revised standard of ISO 14064:1-2018, the base year of Defy’s GHG Inventory has been changed to 2020 from 2019.

Defy documented the greenhouse gas emission inventory management methodology into its procedure called as “0-GHG-2-001 GHG Emissions Inventory” and Arçelik’s procedure called as “GCP-16347 Greenhouse Gas Management System Procedure”.

Greenhouse Gas Emissions Inventory Boundaries

Defy has adopted control approach for Greenhouse Gas Emissions and removals in scope of GHG Inventory-2020.

Within this scope, Direct and Indirect emission-sourced activities of Defy have been included in the inventory.

The boundaries of the Defy’s GHG Inventory are as follows:

- Jacobs Plant- Durban/South Africa: The cooking, washing machine production plant and product warehouse
- Ezakhani Site 360 and Site 180 - Ladysmith/South Africa: The refrigerator, freezer production plant, components manufacturing plant and product warehouse
- East London – Wilsonia/South Africa: The refrigerator, freezer production plant and product warehouse, and service center.

Greenhouse Gas Emissions and Activity Boundaries

In Defy, GHG emissions and removals are grouped into two different categories:

1. Direct emissions (Scope 1):

- Stationary combustion: GHG emissions emitted from stationary sources which uses fuel (Sources: Boilers, cogeneration, generators etc. Fuels: natural gas, fuel oil, LPG



etc.)

- Mobile combustion: GHG emissions emitted from mobile sources. (Sources: Forklifts, lawn-mover, personal cars etc.) (Fuels: fuel oil, diesel etc.)
- Other direct emissions: GHG emissions emitted from other than mobile and stationary sources (refrigerants, chemicals, fire extinguishers and gases)
- Non-anthropogenic biogenic GHG emission: GHG emissions released from biogenic reaction in its own biological wastewater treatment plant

2. Indirect emissions: GHG emission that is a consequence of Defy's operations and activities, but that arises from GHG sources that are now owned or controlled by Defy. These emissions occur generally in the upstream and/or downstream chain.

2.1. Indirect Emissions from Imported Energy (Scope 2):

GHG emissions emitted from purchased electricity, heat, or steam.

2.2. Significant Indirect Emissions (Scope 3):

GHG emissions emitted from sources that are not owned by the company. They are quantified and reported complying with the significance criteria set by Arçelik as defined in the below.

- The magnitude/volume of the emissions,
- The level of influence on sources/sinks,
- The Access to information,
- The level of accuracy of associated data (complexity of organization and monitoring)

Significant Indirect emissions of Defy operations are categorized as given below.

- Indirect GHG emissions from transportation: Business travels, product logistic, employee commuting,
- Indirect GHG emissions from products used by the organization: purchased materials, parts, packaging parts used for production of the sold products,
- ❖ Indirect GHG emissions associated with the use of products from the organization: energy consumption and refrigerant leakage of the sold products during their use phase,
- ❖ Indirect GHG emissions from other sources: waste generated during operation activities at production plants, WEEE (waste electrical and electronic equipment) of the sold products, packaging waste of the sold products, non-anthropogenic biogenic emission released from WWTP (wastewater treatment plant).

Defy's emission boundaries are documented in the FRM-5070 GHG Emission Boundaries Table and its emission sources are detailed with "FRM-5027: Emission Sources and Operational Boundaries Follow-Up Table".



Defy's GHG emissions are aggregated into the following categories at the organizational level:

1. Direct GHG emissions and removals,
2. Indirect GHG emissions from imported energy,
3. Indirect GHG emissions from transportation,
4. Indirect GHG emissions from products used by the organization,
5. Indirect GHG emissions associated with the use of products from the organization,
6. Indirect GHG emissions from other sources.

1. Direct GHG Emissions and Removals

Defy's direct GHG emissions are given as below.

- Jacobs factory
 - ✓ Stationary combustion sources: Natural gas, Diesel, LPG
 - ✓ Mobile combustion sources: LPG, Diesel, Patrol
 - ✓ Other Direct sources : Refrigerant gases (R134a, R407c, R410a, R600a), fire extinguishers (CO₂), CO₂ (argoshield), Acetylene, Butane
- Ezakhani Site 180 Factory
 - ✓ Stationary combustion sources: Diesel, LPG
 - ✓ Mobile combustion sources: Diesel, Patrol,
 - ✓ Other Direct sources: Refrigerant gases (R134a, R404a, R407c, R406, R410a, R600), fire extinguishers (CO₂), Acetylene,
- Ezakhani Site 360 Factory
 - ✓ Stationary combustion sources: Diesel, LPG
 - ✓ Mobile combustion sources: Diesel, LPG
 - ✓ Other Direct sources: Refrigerant gases (R407c, R410a), fire extinguishers (CO₂), Acetylene,
- East London Factory
 - ✓ Stationary combustion sources: LPG
 - ✓ Mobile combustion sources: Diesel, Patrol, LPG
 - ✓ Other Direct sources: Refrigerant gases (R134a, R407c, R410a, R600a), fire extinguishers (CO₂), Acetylene,

2. Indirect GHG Emissions from Imported Energy

GHG emissions emitted from purchased electricity at Jacobs, Ezakhani Site 180 and



Site 360, and East London factories are indirect emissions from imported energy.

The location-based emission factors approach is used for the calculation of GHG emission sources from imported energy.

3. Indirect GHG Emissions from Transportation

Indirect GHG emissions from transportation includes GHG data of business travels (international-domestic), product logistic (domestic, export, import), employee commuting activities. The distance, number of trips, the quantity of passengers, the average weight of the products transported are used to calculate transportation related GHG emissions.

4. Indirect GHG Emissions from Products Used by the Organization

The sources of indirect GHG emissions from products used are raw materials, materials, parts, packages. Their consumption is calculated by choosing the most sold product as a reference model. The weights of materials of the reference model are multiplied with the total sales amount (import, export, domestic) of that product category. The products which are taken into Defy's GHG inventory are refrigerator, freezer, washing machine produced in Defy's production plants. GHG Emissions caused by used materials such as plastic, metals, dyes, chemicals, and other parts of the products are calculated by using weight and emission factors of used materials.

5. Indirect GHG Emissions associated with the Use of Products from the Organization

Energy consumption and refrigerant leakage of the sold products during their use phase are evaluated. The use phase period of the sold products is accepted as 10 years. All sold products amount (import, export, domestic) as sell out data are used for each product categories and included to the quantification calculation. Country Specific electricity emission factor for 90% of countries that most of the products were sold is chosen according to the customer's countries of the sold products. For the rest, the world emission factor is used. The countries where the refrigerator, washing machine, dishwasher, dryer, air conditioner and oven product groups are sold the most are examined. The emission factors of 35 countries with sales volume over 90% of these product groups are obtained by using the IEA's emission factor document for electricity. The world average emission factor value is used for the rest of the remaining 10% countries.

6. Indirect GHG emissions from other sources.

Defy's other greenhouse emissions are the emissions emitted from the recycling process and/or disposal process of waste generated in production, recycling and/or disposal process of packaging waste of sold products, recycling and/or disposal process of waste electrical and electronics equipment (WEEE) which 10 years life time period is ended, and treatment of domestic wastewater in central wastewater treatment plants of municipality or in industrial zone. The logistic transportation activities of waste generated in production plant, product packaging waste and WEEE are not included into Defy's GHG Inventory. The mobile combustion of the subcontractor activities in the production plant are included as other GHG sources.



Greenhouse Gas Emissions Inventory Calculations

Defy's Greenhouse Gas Emissions Inventory calculations are based on mainly "Intergovernmental Panel on Climate Change (IPCC) 2006 and 2019 (2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories)". Database for Defy GHG Inventory are IPCC 2006, IPCC 2019, DEFRA, IEA (International Energy Agency).

The calculation methodologies and emission factors are as follows:

- ✓ The " IPCC-2019 Refinement to the IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 2: Stationary Combustion" is used to calculate the greenhouse gas emissions sourced by stationary combustion.
- ✓ The " IPCC-2006 Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Chapter 3: Mobile Combustion" is used to calculate the greenhouse gas emission sourced by the mobile combustion.
- ✓ Country Specific electricity emission factors for 90% of countries that most of the products were sold are obtained from IEA Country Emission Factor 2020. The world emission factor was used for the rest.
- ✓ Defra- UK Government GHG Conversion Factors for Company Reporting 2020, IPCC 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories Volume 3 Chapter 7: ODS Substitutes , Volume 2 Energy Chapter 2: Stationary Combustion, IPCC Climate Change 2014 Synthesis Report (Fifth Assessment Report-AR5) Chapter 8 - Anthropogenic and Natural Radiative Forcing are used to calculate the other direct greenhouse gas emissions.

In addition to these calculations, the negligible emissions and acceptances are calculated, and the assumptions are documented in the Greenhouse Gas Emission Inventory.

Management of Uncertainties and Materiality

The uncertainties can be caused by the measurement devices, potential record errors and deviations, possible deviations in calorific value and lower - upper values of the fuels.

GHG Protocol Uncertainty tool was used for Defy's uncertainty calculation.

If calibration certificate of measurement devices can not be found, uncertainty analysis is done considering highest error rates defined in the related national standards. If there is no related national standard also, then IPCC Uncertainty Data is used.

Materiality is the sum of GHG inventory uncertainties and negligibles, acceptances. The company materiality has been calculated accordingly.

It has been agreed that the materiality is under 7 %.

Defy Total Uncertainty is $\pm 4,3\%$.

Internal Audits and Control Methods

With data control purposes, internal audits are performed within the scope of ISO 14064-1 Standard and the finding are managed in accordance with the "GTP-16355 Corrective and Preventive Actions Procedure".



Opinion Restatement

Defy's Greenhouse Gas Inventory 2020 is materially correct and is a fair representation of the data and is prepared in accordance with the related international standard on greenhouse gas and to relevant national standards or practices available. It has been agreed that the materiality is under 7 %.

Verified GHG Emissions for the Reporting Period of 2020

Direct and Indirect GHG emissions verified of Defy were as follows:

1. **Direct GHG emissions:** 3,098 tons CO₂ equivalent
2. **Indirect GHG emissions from imported energy:** 24,075 tons CO₂ equivalent
3. **Indirect GHG emissions from transportation:** 57,807 tons CO₂ equivalent
 - 3.1. Business travel: 5,388 tons CO₂ equivalent
 - 3.2. Employee Commuting: 0 tons CO₂ equivalent
 - 3.3. Product logistics (Domestic, import and export logistics operations of the sold products): 52,419 tons CO₂ equivalent
4. **Indirect GHG emissions from purchased goods used by the organization:** 124,365 tons CO₂ equivalent
5. **Indirect GHG emissions associated with the use of sold products:** 2,024,103 tons CO₂ equivalent
6. **Indirect GHG emissions from other sources** (treatment of waste and wastewater generated in production, treatment of packaging waste and end of life of the sold products): 2,078 tons CO₂ equivalent

Total GHG emissions: 2,235,526 tons CO₂ equivalent

Total anthropogenic biogenic GHG emissions: 2,235,522 tons CO₂ equivalent

Total non-anthropogenic biogenic GHG emissions: 4 tons CO₂ equivalent

Cumulative Uncertainty Value: ± 4,3%.

Materiality level: 7%.

