

# Welcome to your CDP Climate Change Questionnaire 2023

# **C0.** Introduction

## **C0.1**

#### (C0.1) Give a general description and introduction to your organization.

As a global company with 13 brands (Arcelik, Beko, Grundig, Blomberg, ElektraBregenz, Arctic, Leisure, Flavel, Defy, Altus, Dawlance, Voltas Beko and Stinol), we offer products and services with subsidiaries in 52 countries, and 30 production facilities in 9 countries with over 40,000 employees worldwide. We are among the three largest white goods companies in Europe regarding market share ranking based on volumes. We reached a consolidated turnover of more than EUR 7.7 billion, with 70% of our revenues coming from the international markets. We have up to 3,000 registered global patent applications with 29 R&D and Design Centers & Offices and more than 2,300 researchers. Sustainability is adapted as a business model in Arcelik with its announced vision "Respecting the World, Respected Worldwide" and sustainability-related efforts are closely monitored and supported by senior management. With a strong focus on sustainability, we are committed to reducing our environmental footprint. To achieve this goal, we are steadily progressing on our road map to improving our environmental performance. Our environmental efforts are guided by legal compliance, policies and internationally recognized standards. In addition, 100% of our manufacturing plants have ISO 14001 Environmental Management System (EMS) Certificate which provides a systematic framework for integrating environmental management practices, supporting environmental protection, pollution prevention, waste minimization, as well as reducing energy, water and materials consumption. At Arcelik, we are taking steps to limit the increase in global temperatures to the 1.5-degree scenario. To achieve this, we are investing heavily in energyefficiency and renewable energy in production and purchasing green electricity to further decrease GHG emissions. We are also investing heavily in R&D to produce energy-efficient products to reduce the GHG emissions associated with the use phase of the products. In 2022, for the fourth consecutive year, Arcelik scored highest among 46 companies assessed in DHP Household Durable Industry in the Dow Jones Sustainability Index of the S&P Global Corporate Sustainability Assessment. Our first Industry 4.0. factory located in Ulmi, Romania, was selected as one of the World Economic Forum (WEF) Sustainability Lighthouses. Our Company was also listed in the Top 20 of the Real Leaders 300 Impact Companies of 2023 and in the Corporate Knights' "2023 Global 100 Most Sustainable Corporations in the World" for the third consecutive year. With its sustainability approach parallel to its vision and UN Sustainable Development Goals, Arcelik aims to develop and market resource and energyefficient products, innovative in design, easy to use, while fulfilling its commitment to work on



solutions against future threats such as drought, global warming or natural resource depletion.Arcelik's GHG emissions are calculated in accordance with ISO 14064-1 and were audited and verified by an independent body in "100% verification" and reasonable assurance level.Since 2013, Arcelik's Scope 3 emission from domestic logistics was calculated and verified by third party.In 2019 Arcelik succeeded transition to ISO 14064-1:2018 Std. in Turkey operations and calculated its Scope 3 emissions include purchased goods, business travel, employee commuting, treatment of waste, wastewater generated in production and packaging waste of sold products, use of sold products, downstream transportation and end of life treatment. In 2012, Arcelik established ISO 50001 Energy Management System. 10 of Arcelik's production plants achieved a "Platinum" certificate for energy efficiency. Arcelik values sustainable procurement of raw materials, sustainable design of each product, and low impact production. It put great importance on increasing product recyclability and lowering end consumer resource consumption to contribute to the transition to low carbon economy, announced a 350 million Euro Green Bond issuance in 2021, and prepared Green Financing Framework including our low-carbon transition plans. Arcelik has approved Science Based Targets (SBTs) for a well-below 2-degree scenario to reduce Scope 1 and Scope 2 GHG emissions by 30% and Scope 3 GHG emissions from the use phase of sold products by 15% by 2030 from a 2018 base year. Arcelik has also committed to the Science Based Targets Initiative to become a Net Zero Company as of 2050 in line with the Science Based Targets Net Zero Standard 1.5-degree scenario. We will revise the new base year target as 2022 and broaden the scope to include all of Arçelik's joint ventures as well as all MDA (major domestic appliance) product groups. We will submit our Net Zero Target to the Science Based Targets Initiative as of 2024 March for validation. Being one of the supporters of the TCFD, Arcelik has an integrated approach to monitor, measure and manage the climate risks and the impact on the financials.

### **C0.2**

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

#### **Reporting year**

Start date

January 1, 2022

#### End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years No

### **C0.3**

#### (C0.3) Select the countries/areas in which you operate.

Bangladesh China India



Pakistan Romania Russian Federation South Africa Thailand Turkey

## **C0.4**

(C0.4) Select the currency used for all financial information disclosed throughout your response.

TRY

## **C0.5**

(C0.5) Select the option that describes the reporting boundary for which climaterelated impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

### **C0.8**

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier	
Yes, a Ticker symbol	ARCLK	

# **C1. Governance**

## C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

## C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Director on board	The Board of Directors (BoD) is the highest governing body for the management of sustainability strategy including climate risks and opportunities and is responsible



for overseeing the implementation of Arcelik's Net Zero Strategy. One board member, who is also Arçelik's parent Company Koç Holding's Consumer Durables President, has been appointed by the BoD as the responsible board member to inform the BoD on major achievements, risks and opportunities faced by Arcelik in the implementation of the Net Zero Strategy and oversees the climate-related risks. In 2022, three reports were prepared for the attention of the BoD, which were presented in the BoD meetings. The submission of the commitment to make our 2050 Net Zero commitment in line with the Science Based Targets initative's (SBTi) Net Zero Standard to the SBTi, investments on renewable energy, engagement with suppliers on emission reduction target plans, Scope 3 product emission tracking system implemented on more than 40 subsidiaries were part of items included in these reports. The Sustainability Council (SC), chaired by the CFO is the highest management-level committee responsible for assessing and managing climate and other ESG-related risks and opportunities. The SC gathers quarterly to evaluate the company's ESG risks and opportunities and shapes the strategy going forward. The Quality, Sustainability and Corporate Affairs Executive Director, reporting directly to the CEO, is the highest management level position with the responsibility to adapt strategic action plans for climate change-related mitigation and adaptation risks. The Quality, Sustainability and Corporate Affairs Executive Director has been mandated by the BoD with a Board Decision to report and inform the BoD of the company's overall sustainability strategy. As an example of a decision made by the Board of Directors; Arcelik's science-based targets and net-zero commitment in 2050 have been submitted to SBTi after it was approved in the meeting.

# C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issue	es.
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Frequency with which climate- related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the	The critical topics which will be included in the Sustainability Council is defined based on the risks which are reported to the Enterprise Risk Management and the Risk Committee. In parallel with that, physical risks are one of the main focus points of the Sustainability Council. For instance, the Council monitors and evaluates water risks, strategies and impact on business objectives quarterly. Risks and opportunities are prioritized by the Sustainability Council according to the scoring methodology of Arçelik. According to Arçelik's risk and opportunities are scored based on financial, reputational, production,



development of a	human and legal impacts, and the highest score is
transition plan	defined as the point of impact. Other risks are defined
Monitoring the	with the mutual works of Sustainability WGs and
implementation of a	related Committees.
transition plan	The Sustainability Council (SC), which is a board-level
Overseeing and	entity led by the CFO, gathers quarterly
guiding scenario	and determines corporate sustainability and climate
analysis	change strategies, ensures their integration with the
Overseeing the setting	Company's business processes, and monitors
of corporate targets	sustainability performance.
Monitoring progress	Arçelik Sustainability Management Department is
towards corporate	responsible for qualitative-quantitative identification
targets	of climate-related and other ESG risks based on
Overseeing and	scenario analysis in terms of both physical and
guiding public policy	transition risks and reports such risks to the Enterprise
engagement	Risk Management Department. Enterprise Risk
	Management Department includes these climate-
Overseeing value	related risks and other ESG risks in its reports to the
chain engagement	Risk Management Committee, which is the board-level
Reviewing and guiding	committee with oversight of climate-related issues, at
the risk management	least two times a year.
process	In order to ensure effective implementation of the
	Company's long-term ESG strategy and its Science
	Based Targets, 2030 Environmental and Social
	Targets, and 2050 Net Zero Strategy, the ESG KPIs
	are included in the C and D level executives' and
	business unit managers and related expert employees'
	annual performance evaluation score cards linked to
	annual compensation and bonuses as incentives.
	Arçelik works in collaboration with all public bodies,
	NGOs, trade associations, and other related
	organizations or institutions in the advancement of the proposed legislation and/or other related regulations
	which may affect legitimate business interests that are
	compatible with international human rights legislation
	and the Paris Agreement. While working with these
	related bodies, it is of utmost importance that the
	policies of the Trade and Industry Associations and all
	other stakeholders in which Arçelik is a member
	complies with the Paris Agreement and its climate
	change policy to keep global warming limited to 1.5
	degrees as well as the UN Guiding Principles on
	Business and Human Rights.
	Arcelik integrates its material sustainability topics into
	governance processes by identifying risks,
	o



		opportunities, and business cases and defining targets and metrics throughout our value chain.
Scheduled – some meetings	Overseeing acquisitions, mergers, and divestitures Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement	Climate-related issues are one of the priority agenda items of the Board of Directors' investment and company strategy meetings.

# C1.1d

# (C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	The company CEO is a Board member with competence on climate- related issues. The basis for assessment of competence is based on experience and active participation on climate-related issues. Arcelik CEO is a member of the Alliance of CEO Climate Leaders and CEO Water Mandate. He was announced as the New Executive Committee (ExCo) member in 2023 for WBCSD. He oversees decarbonization, sustainable supply chain and circularity targets which are included in his performance evaluation metrics. He is also a climate activist himself, having summited Mount Everest to raise awareness of climate change. The other Board Member - who is also Koç Holding Consumer Durables' President has been tasked with reporting the ESG-related issues to the BoD and also oversees the climate-related risks. The same Board Member also sits on the Risk Committee and regularly



	gets informed on the climate-related risks and opportunities as well as
	investment needs on Arçelik's journey to net zero as of 2050.
	The CEO is also a natural member of the Sustainability Council which
	gathers quarterly during a year. There, the strategic risks and
	opportunities related to climate issues are discussed in detail. The
	decisions taken on the SC are reported to the President of Consumer
	Durables. Both Board members are regularly and thoroughly informed
	on the risks associated with the transition to a low carbon economy in
	terms of both transition and adaptation risks. The transition-related
	risks the CEO is periodically informed of include the risk of increases in
	the price of carbon, the costs associated with the SBTs of the
	Company, and the costs, and opportunities associated with
	investments in renewable energies as well as renewable energy as a
	new business line in Turkey operations.

## C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

#### **Position or committee**

Chief Financial Officer (CFO)

#### Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities Implementing a climate transition plan Integrating climate-related issues into the strategy Monitoring progress against climate-related corporate targets Managing climate-related risks and opportunities

#### Coverage of responsibilities

#### **Reporting line**

Reports to the board directly

# Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

#### **Please explain**

The Sustainability Council (SC), chaired by the CFO is the highest management level committee responsible for assessing and managing climate and other ESG-related risks and opportunities. The SC gathers quarterly

to evaluate the company's ESG risks and opportunities and shapes the strategy going forward.



## C1.3

# (C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	In order to ensure effective implementation of the Company's long- term ESG strategy and its Science Based Targets, 2030 Environmental and Social Targets and 2050 Net Zero Strategy, the ESG KPIs mentioned below are included in the C and D level executives' and business unit managers' annual performance evaluation score cards linked to annual compensation.

## C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

#### Entitled to incentive

Chief Executive Officer (CEO)

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary Salary increase

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Reduction in absolute emissions Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Increased share of revenue from low-carbon products or services in product or service portfolio Increased engagement with suppliers on climate-related issues Increased supplier compliance with a climate-related requirement Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

#### Incentive plan(s) this incentive is linked to



#### Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

A performance management system called Objectives Key Results (OKRs) is identified for employees, including the CEO. Among the CEO's OKRs climate-related KPIs are integrated such as;

- Increasing energy and water efficiency in production to decrease Scope 1-2 emissions
- Increasing the share of renewable energy systems' installed capacity for on-site consumption
- · Increasing the waste reduction rate of factories in production
- Production and sale of energy-efficient appliances aligned with Science Based Targets requirements to decrease Scope 3 emissions in the customer use phase
- Increasing the number of suppliers setting GHG emission reduction targets aligned with Arçelik's requirements & Arçelik's targets set for suppliers
- Reducing logistics emissions from transportation to decrease logistics-related Scope 3
  emissions
- Increasing recycled content in products
- · Switching to hybrid and 100% EPS-free designs in product packaging
- Creating infrastructure for IFRS Sustainability Reporting Standards

These KPIs are linked to annual compensation and bonuses as incentives.

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

By integrating the climate-related KPIs into the CEO's OKRs, Arcelik ensures that the climate strategy and goals are adopted, monitored and worked for at the highest management level.

#### **Entitled to incentive**

Chief Financial Officer (CFO)

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary Salary increase

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Reduction in absolute emissions Reduction in emissions intensity Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Increased investment in low-carbon R&D



#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

A performance management system called Objectives Key Results (OKRs) are identified for employees, including the CFO. Among the CFO's OKRs climate-related KPIs are integrated such as

• Increasing energy and water efficiency in production to decrease Scope 1-2 emissions

• Increasing the share of renewable energy systems' installed capacity for on-site consumption

· Increasing the waste reduction rate of factories in production

• Production and sale of energy-efficient appliances aligned with Science Based Targets requirements to decrease Scope 3 emissions in the customer use phase

· Creating infrastructure for IFRS Sustainability Reporting Standards

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

By integrating the climate-related KPIs into the CFO's OKRs, Arcelik ensures that the climate strategy and goals are adopted, monitored and worked for at the highest management level.

#### **Entitled to incentive**

Chief Technology Officer (CTO)

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary Salary increase

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Implementation of an emissions reduction initiative Reduction in emissions intensity Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Increased investment in low-carbon R&D

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)



A performance management system called Objectives Key Results (OKRs) are identified for employees, including the Chief Technology Officer. Among the Chief Technology Officer's OKRs climate-related KPIs are integrated such as;

- Increasing energy and water efficiency in production to decrease Scope 1-2 emissions
- Increasing the share of renewable energy systems' installed capacity for on-site consumption
- · Increasing the waste reduction rate of factories in production
- Production and sale of energy-efficient appliances aligned with Science Based Targets requirements to decrease Scope 3 emissions in the customer use phase
- Increasing recycled content in products
- Switching to hybrid and 100% EPS-free designs in product packaging

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

By integrating the climate-related KPIs into the Chief Technology Office's OKRs, Arcelik ensures that the climate strategy and goals are adopted, monitored and worked for at the highest management level.

#### **Entitled to incentive**

Executive officer

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary Salary increase

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Implementation of an emissions reduction initiative Reduction in emissions intensity Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Increased share of renewable energy in total energy consumption Increased share of revenue from low-carbon products or services in product or service portfolio Increased engagement with suppliers on climate-related issues Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan



#### Further details of incentive(s)

A performance management system called Objectives Key Results (OKRs) are identified for employees, including the Quality, Sustainability and Corporate Affairs Executive Director. Among the Quality, Sustainability and Corporate Affairs Executive Director's OKRs climate-related KPIs are integrated such as;

• Increasing energy and water efficiency in production to decrease Scope 1-2 emissions

• Increasing the share of renewable energy systems' installed capacity for on-site consumption

· Increasing the waste reduction rate of factories in production

• Production and sale of energy-efficient appliances aligned with Science Based Targets requirements to decrease Scope 3 emissions in the customer use phase

• Increasing the number of suppliers setting GHG emission reduction targets aligned with Arçelik's requirements & Arçelik's targets set for suppliers

Reducing logistics emissions from transportation to decrease logistics-related Scope 3
emissions

· Increasing recycled content in products

· Switching to hybrid and 100% EPS-free designs in product packaging

· Creating infrastructure for IFRS Sustainability Reporting Standards

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

By integrating the climate-related KPIs into the Quality, Sustainability and Corporate Affairs Executive Director's OKRs, Arcelik ensures that the climate strategy and goals are enforced at the executive management level.

#### **Entitled to incentive**

Business unit manager

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary Salary increase

#### Performance indicator(s)

Achievement of climate transition plan KPI Progress towards a climate-related target Achievement of a climate-related target Implementation of an emissions reduction initiative Reduction in emissions intensity Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Increased share of revenue from low-carbon products or services in product or service portfolio



Increased engagement with suppliers on climate-related issues Increased supplier compliance with a climate-related requirement Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

A performance management system called Objectives Key Results (OKRs) are identified for employees, including the related business unit managers. Among these OKRs climate-related KPIs are integrated such as:

- Increasing energy and water efficiency in production to decrease Scope 1-2 emissions
- Increasing the share of renewable energy systems' installed capacity for on-site consumption
- · Increasing the waste reduction rate of factories in production

• Production and sale of energy-efficient appliances aligned with Science Based Targets requirements to decrease Scope 3 emissions in the customer use phase

• Increasing number of suppliers reporting their environmental and social data to the Supplier Sustainability Index system

• Increasing number of suppliers setting GHG emission reduction targets aligned with Arçelik's requirements & Arçelik's targets set for suppliers

• Reducing logistics emissions from transportation to decrease logistics-related Scope 3 emissions

- Increasing recycled content in products
- · Switching to hybrid and 100% EPS-free designs in product packaging
- · Creating infrastructure for IFRS Sustainability Reporting Standards

# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

By integrating the climate-related KPIs into the relater business unit managers' OKRs, Arcelik ensures that the climate strategy and goals are regularly worked on.

#### **Entitled to incentive**

All employees

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary

#### Performance indicator(s)

Progress towards a climate-related target Implementation of an emissions reduction initiative Reduction in absolute emissions Reduction in emissions intensity



Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Reduction in total energy consumption Increased investment in low-carbon R&D Increased share of revenue from low-carbon products or services in product or service portfolio Increased engagement with suppliers on climate-related issues Increased engagement with customers on climate-related issues Increased value chain visibility (traceability, mapping, transparency)

#### Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

#### Further details of incentive(s)

In order to increase the motivation, success, and productivity of its employees and to materialize best practices and ensure their dissemination; Arçelik evaluates, rewards, and ensures promotion within the company to all success, inventions, and suggestions that provide benefit. In this context, since 2005 Human Resources Dept. of Arçelik has been implementing a "Pyramid Climbers Awards" annually. All employees who are successful are encouraged and rewarded. One category of this award process is "Environment and Society Contributors". Projects nominated in this category are evaluated and concluded according to the following performance indicators:

 To produce higher efficient solutions and/or products that reduce greenhouse gas emissions by spending less energy and sourcing by environmentally friendly activities
 To develop projects that would contribute to the society lived and worked in with the perspective of social responsibility

3. To set an example in/out of the company with studies and make an effort for sustainability and dissemination of studies

Environmentally friendly activities for product and production with energy efficiency projects are evaluated under this reward process. Rewardable projects and solutions are announced within the company and the project owners are rewarded in the "Pyramid Climbers Award Ceremony" annually. Arcelik develops environmentally friendly, innovative, and technological products which increase the life standards of customers with R&D employees. The R&D Department collects creative and innovative ideas of employees through a suggestion system called "Inter", an evaluation board evaluates suggestions, and project design opportunity is created for ideas that may be transformed into a product. In the name of encouraging employees to creativity, ensuring the announcement of creative ideas within the company, and rewarding owners of such ideas "The Invention Award Ceremony" is organized on World Patent Day (in April) every year. By using TPM tools, our white and blue-collar employees develop projects on subjects like environment, energy, and climate change, and such projects are identified at individual performance scorecards of employees. Employees receive individual performance points in consideration of TPM activities they perform and they are rewarded at year-end in response to these points by using tools like a situational reward.



# Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Arçelik ensures that climate-related plans and actions are internalized by including all employees in studies and projects related to climate change. Employees who will achieve Arçelik's short- and long-term climate targets are motivated by this incentive to actively develop emission reduction projects in products and production.

# C2. Risks and opportunities

## C2.1

# (C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

## C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	The short-term is determined as 1-3 years time horizon in the context of climate-related risks and opportunities in Arçelik.
Medium- term	3	10	The medium-term is determined as 3-10 years time horizon in the context of climate-related risks and opportunities in Arçelik.
Long-term	10	30	The long-term is determined as 10-30 years time horizon in the context of climate-related risks and opportunities in Arçelik.

## C2.1b

# (C2.1b) How does your organization define substantive financial or strategic impact on your business?

Having defined aligning the company's risks with corporate goals and strategies as its main framework, Arçelik A.Ş. Enterprise Risk and Insurance Management matches strategy and goals with the risks. Enterprise Risk Management (ERM) Team determines the outstanding risks on a global scale and is responsible for the integration of company-wide risks and their potential financial as well as operational implications onto a risk matrix that shows risks based on their priority, factoring in the risk appetite and risk tolerance. In the process, global best practices are taken into consideration, especially ISO 31000 Risk Management Standard and COSO Enterprise Risk Management Framework. All identified risks are prioritized in view of various metrics including risk score, financial impact etc., which allows determination of the risks on which focus needs to be placed; thus, risk management is captured in all levels of functions and operations and integrated in the decision-making mechanisms of the Senior Management. According to Arçelik's risk and opportunity scoring methodology; the risks and opportunities are scored (1-5 points) considering financial, reputation, production, operational,



human, and legal impacts and the maximum score is defined as an impact point. All risks are evaluated according to impact and frequency criteria. The frequency of the risks and opportunities are also scored (1-5 points). The risk (R) and opportunity (O) points are scored by multiplying frequency (F) and impact point (I) for prioritization (R, O=F\*I). For scoring financial impact, Arçelik risk tolerance level should be considered. Risk tolerance can be defined as an appropriate level of financial loss that does not have a significant impact on the company. In Arcelik the substantive financial impact is related to Arcelik risk tolerance level and is defined according to financial loss before tax. The risks levels are defined as follows: -Low: Less than 9 million EUR loss or 1% decrease in EBITDA -Moderate: Between 9 - 27 million EUR loss or 1% - 3% decrease in EBITDA -High: Between 27 - 45 million EUR loss or 3% - 5% decrease in EBITDA -Severe: Between 45 - 90 million EUR loss or 5% - 10% decrease in EBITDA -Critical: More than 90 million EUR loss or 10% decrease in EBITDA In Arcelik, Risk Management System is an integrated multi-disciplinary process. Strategic, operational, physical, financial, reputational, and environmental risks and opportunities are covered in Arcelik Risk Management System to the fulfillment of the short, medium, and longterm goals. Each year climate-related risks and opportunities are assessed and audited by the internal and external integrated systems' (ISO14001&ISO50001&ISO14064-1) audit experts in site audits. .

In addition, ESG-related topics are analyzed in line with the double materiality approach. The issues that are identified as material in terms of financial an impact aspects are considered in terms of their risks, opportunities, busines cases, business strategies and impact valuation.

### C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climaterelated risks and opportunities.

Value chain stage(s) covered

Direct operations Upstream

#### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

#### **Frequency of assessment**

More than once a year

#### Time horizon(s) covered

Short-term Medium-term Long-term

#### **Description of process**

Enterprise Risk Management (ERM) Team determines the outstanding risks on a global scale and is responsible for the integration of company-wide risks and their potential financial as well as operational implications onto a risk matrix that shows risks



based on their priority, factoring in the risk appetite and risk tolerance. Given that Arçelik is a signatory of the Task Force on Climate-related Financial Disclosures (TCFD), it is critical

to integrate risks originating from climate crisis and other ESG (environmental, social, governance) issues in

the company's general risk analyses and to execute the associated action plans in line with the company's Net Zero

by 2050 strategy as well as overall sustainability strategy. As climate change is the predominant risk factor in ESG related risks, the Board Member - who is also Koç Holding Consumer Durables' President - who has been tasked with reporting the ESG related issues to the BoD also oversees the climate-related risks. In addition, Arçelik Sustainability

Management Department is responsible for qualitative-quantitative identification of climate related and other ESG risks

based on scenario analysis in terms of both physical and transition risks and reports such risks to the Enterprise Risk Management Department. Enterprise Risk Management Department includes

these climate related risks and other ESG risks in its reports to the Risk Management Committee, which is the board level committee with oversight of climate-related issues, at least two times a year. The Risk Management Committee monitors and reviews the climate related risks and opportunities and has responsibility to oversee the implementation of the mitigation action plans for both transition risks and physical risks. In 2022, the infrastructure to integrate the climate related risk issues to these meetings was implemented. The climate related risk items discussed in the Risk Management Committee meetings were:

• Potential financial implications of the implementation of the EU Carbon Border Adjustment mechanism based on several scenario analysis of the cost of the potential tax

• Arçelik's Net Zero 2050 Commitment to the Science Based Targets initiative, the longterm investment needs, risks and opportunities on the way to implementation of the roadmap, including the cost of carbon on

voluntary markets

• Water scarcity risk as a result of physical risk analysis, and the investments, actions needed to reach a 70% water recycling ratio in production facilities globally

• Regulations that would have direct financial impact on Arçelik operations such as the WEEE regulations as well as plastic packaging taxes

The Sustainability Council (SC), chaired by the Chief Finance Officer (CFO) is the highest management level committee that governs the climate-related and other ESG risks and opportunities. The purpose of the SC is to monitor the implementation of the Group Sustainability Strategy, with a specific focus on implementation of the Net Zero 2050 Roadmap. The below mentioned climate related issues have

been discussed with necessary action plans during the meetings:

• Investment need and related action plans to increase the renewable energy capacity globally,

• Long-term investment need related to the Science Based Targets Net Zero 2050 commitment, the potential implications of the price increases in the voluntary carbon markets, especially nature-based removals



· Biodiversity and deforestation commitments and the necessary action plans needed

• Information demand from trade partners in the retail channel on energy efficiency, recycled content, durability, and repairability.

The Enterprise Risk Management and Finance Directorate and the dedicated sustainability teams consisting of Sustainability, Environment, Energy, International Regulations and Sectoral Relations HQ teams as well

as the related teams working in each factory work cooperatively to evaluate, measure and prioritize the climate-related risks and opportunities. Their main aim is designed to turn non-financial risk items into financial

metrics. Various reports are prepared by taking physical and transition risks stemming from the climate change into account.

In consideration of the identification of such risks, the HQ teams and the factory teams work on location-wise hazard maps and scenario analyses for climate-related physical risks.. Water scarcity risks turn out to be the most predominant risk that would affect operations both for company operations and operations at the supply chain.

For transition-related policy risks, Arçelik HQ teams work on consolidated GHG emissions data of the Company together with respective future forecasts based on production and work on scenario analysis on how the

cost of carbon would change over time based on potential Emission Trading Scheme (ETS) scenarios and Carbon Border Adjustment Mechanism (CBAM) scenarios. The potential rise in the cost of carbon in voluntary

markets and the Project offerings in the market for nature-based and technological carbon removal credits is also closely monitored and the related financial risks are computed. Climate-related transition and physical risks are assessed as part of qualitative and quantitative risk reporting based on how they would impact the balance sheet and cash flow of the Company.

During these risk management processes all value chain is considered regarding their climate risks. For example we

support and make a serious effort to increase the sustainability performance of our suppliers.

We also handle water risks for all value chain stages for short, medium and long-term horizons. We work to identify water

risks, not only in the regions where we manufacture but also in all regions where the suppliers are located, to increase water recycling and reuse, and to reduce water withdrawal. At Arçelik, reducing our consumers' water footprint as well as that of our operations is one of our top priorities. To decrease our water withdrawal in all our manufacturing plants, we perform

water efficiency, water recycling and reuse projects.

At Arçelik, we have assessed our biodiversity risk assessment within the scope of our own operations to address our nature-related impacts and dependencies. Based on the outputs of the assessment, we apply Mitigation Hierarchy by preventing, minimizing, and mitigating factors that threaten biodiversity periodically.

Value chain stage(s) covered Upstream



#### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

#### Frequency of assessment

Annually

#### Time horizon(s) covered

Short-term Medium-term Long-term

#### **Description of process**

Adopting effective supply chain management plays a crucial role in managing a company's social and environmental impacts. At Arçelik, we are fully committed to integrating environmental, social, and governance metrics into our approach to the entire value chain. The Company's attitude and activities related to sustainability are also reflected in the suppliers. We support and make a serious effort to increase the sustainability performance of our suppliers. We make our purchasing operations sustainable and monitor their continuity through risk management processes, sustainable supplier indexes, supplier audits, communication activities, and supplier training. Supplier ESG Program is a procedure which is designed to ensure ESG strategies are embedded into supplier selection and evaluation criteria to identify material risks and impacts, ensuring that supplier business

practices are in line with Arcelik Global Responsible Purchasing Policy. The Supplier ESG Program covers Environmental Management, Energy Management, Conflict Minerals Management, Human Rights, and Ethics. Board of Directors is responsible for the oversight of the implementation of the Supplier ESG Program. Further details can be found in the Supplier ESG Program document. In the supplier selection process, all potential suppliers are assessed by a limited survey that covers quality, environment and business ethics aspects. For contract rewarding to the existing significant suppliers, quality, timely delivery, and ESG score determined based on the Supplier Sustainability Index are considered. In order to have a comprehensive understanding of the supply chain risks and dependencies from ESG and business perspective, Arcelik carries out a screening process as defined in the Supplier ESG Program to better manage the related risks. In supplier screening process, several risk factors are taken into account such as the country-specific risks, commodity-specific risks, and sector-specific risks as well as the dependence on the supplier and the potential ESG risks of the supplier. In determining significant suppliers for the company, business relevance aspects such as the purchasing volume, dependence on the supplier in terms of sourcing critical components or in terms of being an unsuitable supplier are combined with potential ESG risks of the supplier based on environmental risks, social risk, and governance risks. Arcelik has set a prerequisite that from 2023 going forward, all Arcelik suppliers either have a ISO 14001 Environmental Management System certificate or have at least initiated the application process. This is the first evaluation criteria. Arçelik also evaluates potential environmental risks based on the process of the supplier and suppliers that have the potential to have a more harmful environmental impact are given a different risk level and prioritization for environmental impact data collection. We developed an in-house Supplier Sustainability Index project under Supplier ESG



Program. The project has been initiated with the direct (Tier 1) material and product suppliers. In 2022, we have continued working on

building the same infrastructure with our logistics suppliers The aim is to understand our suppliers' ESG-related risks and opportunities by collecting and analyzing their data. Our main intention is to enable Scope 3 emissions reduction in the value chain. Therefore, each year we carry out supplier screening processes considering ESG-related risks and business relevance to determine significant suppliers which will be given priority in the assessment process. Environmental Data Collection and Performance Monitoring Process:

This process consists of two parts: qualitative and quantitative data collection. In the qualitative part, the following questions are asked:

• Sustainability reporting and tracking of environment/ energy performance KPIs

- Environmental Policy
- ISO 14001 Environmental Management Systems
- · Compliance with environmental regulations and environmental penalties
- Compliance with Arçelik Chemicals Compliance Management Policy

• Operational eco-efficiency- Third-party verification of the Scope 1-2 emissions with respect to the ISO 14064 Standard

• ISO 50001 Energy Management Certificate Systems

• Recycled-reused materials used for Arçelik Working on environmental projects such as LCA, waste heat recovery, wastewater recovery, CDP reporting, etc.

We believe that the suppliers we work with should, as a minimum, have established ISO 14001 Environment Management Systems and ISO 50001 Energy Management Systems. The ISO 14001 Environmental Management System provides guidance as to which environmental systems should be established. The ISO 50001 Energy System provides guidance as to which energy efficiency measures must be implemented. Suppliers are encouraged to build on top of these systems to increase their positive impact.

We have set the following targets:

• As of 2023, suppliers\* are required to have the ISO 14001 Environmental Management Systems Certificates.

• As of 2025, our suppliers\* above 1,000 tons of oil equivalent (TOE) are required to have ISO 50001 Certificates.

• As of 2030, our suppliers\* above 500 TOE are required to have ISO 50001 Certificates.

As a further deep dive into the quantitative environmental data collection part, it is important to emphasize our rationale behind this effort. Having committed to Net-Zero 2050 targets within the entire value chain, supply chain decarbonization is critical. We would also like to understand the environmental impact from a more general perspective of our supply chain. Therefore, we have started to increase our collaboration with our suppliers to improve their environmental performance.

The data we collect consists of:

Direct and indirect Scope 1 and Scope 2 emissions

• Water withdrawal in m3: surface, well water, public grid water, tanker water, and rainwater harvest

• Recycled wastewater, wastewater

· Hazardous and non-hazardous waste, and packaging waste



- Specific energy consumption (TOE/product)
- Green electricity purchased
- Renewable energy for self-consumption

As of 2025, we have committed to collecting the scope 1–2 GHG emissions, water withdrawal, wastewater, recycled water, hazardous and non-hazardous waste, and energy consumption data for more than 450 suppliers, corresponding to 90% of our purchasing volume. We intend to make the consolidated data public to transparently report the impact of our supply chain. For our 2022 data collection, we collected environmental data from 159 suppliers, reaching 33% of our target.

## C2.2a

# (C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
regulation	Not relevant, explanation provided	Arcelik closely follows the climate-related regulations it is subject to and takes all necessary actions to comply with them. Thus, current regulations do not present a relevant risk for Arcelik.
regulation	Relevant, always included	Regulation on EU Carbon Border Adjustment Mechanism (CBAM) entered into force on 17 May 2023 and will take effect from 1 October 2023 with a transition period until the end of 2025. It is expected that the EU Commission will formally adopt the Implementing Regulation later in 2023 after a vote in the CBAM Committee. In line with the EU's aggressive target to reduce GHG emissions by 55% until 2030 from 1990 baseline, CBAM on imported goods intends to stop companies moving investments outside the EU to avoid emissions standards, which is known as carbon leakage. Emerging regulations on EPS-free packaging are considered in Arcelik's climate-related risk assessment. Some markets in which Arçelik operates like the UK and Spain have already introduced taxes on single use plastic packaging. However, a more challenging regulation that completely bans styrene based plastic packaging has entered into force in France and is expected to enter into force in Australia. Emerging carbon tax mechanisms are monitored and followed by Arcelik as well. Increasing decarbonization efforts accelerate the use of these mechanisms. For example, a market-based carbon pricing mechanism is being planned in Turkey. Even though the trends regarding ETS mechanism signals that a regulation for household appliances is not likely in the near future, Arçelik calculates its possible ETS-related risk based on the unlikely scenario that it will be subject to a regulation in 2030 in order to prepare in advance. Household appliances sector also face energy labelling requirements. Emerging regulations are included in the risk assessments of Arcelik. According to upcoming regulations, certain product groups with



		energy efficiency levels below the standard will not be able to take place in the market starting from 2024. Similar regulations might enter into force in different regions as well.
Technology	Relevant, always included	There is an accelerating shift in demand expected to more energy- efficient appliances as part of efforts to keep the global warming in line with 1.50C scenario (IEA STEPS, SDS, Net Zero 2050). Increasing number of companies committing to net zero targets and further improvement of innovative business models and emergence of new technologies on the way to net zero. In order to stay well- positioned in the competition Arcelik needs to follow the technology updates and be able to supply products with most recent technology.
Legal	Not relevant, explanation provided	Arcelik closely follows the climate-related legislation it is subject to and takes all necessary actions to comply with them. Thus, do legal risks do not present a relevant risk for Arcelik.
Market	Relevant, always included	The household durables markets change in relation to to climate- related effects both in terms of shift in consumer preferences and also in terms of the product efficiency performances. With increasing customer awareness, more eco efficient products are demanded. Thus, Arcelik will need to invest heavily on r&D activities to produce eco efficient products. On the other hand, eco-efficiency efforts will bring cost up per product. There is a risk that Arçelik might not be able to reflect the cost increases per product to the sales price in case the competitors in the market do not follow a similar pattern. The market dynamics might force Arçelik to incur additional cost up, which would deteriorate the company's profitability. Arcelik also operates in emerging markets for purchasing power is limited. Selling more eco- efficiengt products in these markets presents an extra challange.
Reputation	Relevant, always included	Sustainability and climate performance is becoming more important everyday for a reputable brand and company image in the eyes of investors, trade partners and end-users. Thus, Arcelik sees its climate performance as an integral part of its company image. Arcelik has public climate-related targets, sustainability and TCFD reports and declarations. Conducting its business practices and operations in line with these commitments are highly valuable for Arcelik. For this reason, Arcelik closely monitors the progress against its targets, publishes reports in line with GRI and TCFD standards, takes place in Dow Jones, FTSE4Good etc. indices. Arcelik also takes active role in organizations such as WBSCD, EP100, UN Global Compact, WEF CEO Alliance Forum.
Acute physical	Not relevant, explanation provided	The effects of the climate crisis, such as heat waves, droughts, wildfires, sea-level rise and floods are becoming more prevalent globally. In a potential scenario where, global warming cannot be reduced to "Wellbelow 2°C" and eventually to "1.5°C", companies will face financial and operational risks arising from physical risks in relation to excessive global warming, which is expected to be



		between 2.6°C and 4°C based on the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCPs). These are GHG concentration trajectories: RCP 2.6 (Low Climate Scenario), RCP 4.5 (Moderate Climate Scenario) and RCP 8.5 (High Climate Scenario). Based on Arçelik's internal analysis, as well as using S&P's TruCost Methodology, physical risk assessments are conducted based on the S&P Trucost Approach, which leverages Arçelik's physical risks at the asset level, as well as those of its suppliers, taking into consideration climate hazard indicators such as water stress, flood, heat waves, cold waves, hurricane, and sea-level rise, and their impact on Arçelik's operations. The results show that acute physical risks do not present a significant risk for Arcelik's operations.
Chronic physical	Relevant, always included	In a world where the RCP 4.5 moderate or RCP 8.5 scenarios become reality, the adaptation costs to put up with the continuity of operations will be significantly higher compared to the Low Climate RCP 2.6 scenario. Arcelik conducted a detailed analysis with the S&P Trucost ESG methodology, WRI Aquaduct and Arcelik internal expertise have been combined to develop a methodology. The combined methodology leverages physical risks of Arçelik at the asset level, as well as its suppliers, taking into consideration climate hazard indicators such as water stress, flood, heatwaves, cold waves, hurricane, sea level rise, etc. and their impact on Arçelik's operations. The High Climate Scenario (RCP 8.5), the Moderate Climate Scenario (RCP 4.5) and the Low Climate Scenario (RCP 2.6) were taken into consideration with a forecast for the 2030 and 2050 fiscal years from a 2020 baseline. • According to the Trucost Physical Risk assessment, Arçelik's overall physical risk score is moderate, main risk item being water stress. • According to the detailed physical risk analysis focusing on water stress conducted by Arcelik's in-house team based on WRI Aqueduct data, Some Turkey locations (Eskişehir, Manisa Ankara) in addition to Pakistan and India are prone to water stress risk at an "extremely high" level. Especially, Dawlance factory in Pakistan is at risk of not obtaining the consumption amount needed for production. • Based on Trucost analysis, Arçelik's suppliers' main physical risks are related to water stress as well. Therefore, Arçelik and the company's suppliers' operations and potential disruption in supply chains of critical materials in countries prone to high heatwave/cold wave/flood risks. Due to these risks, Arçelik might potentially incur reduced revenue and market loss from decreased production capacity, logistics problems, and supply chain interruptions. There might also be a potential CAPEX need in case of damage to production facilities or at a supplier/customer site.



Since physical risks are expected to result in significant economic
losses and social consequences, the purchasing power of customers
especially in the APAC and Africa regions more prone to physical
risks from
climate catastrophe might decline and thus this potentially will have a
negative impact on Arçelik sales.

### C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

## C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

#### Identifier

Risk 1

Where in the value chain does the risk driver occur?

Upstream

#### Risk type & Primary climate-related risk driver

Emerging regulation Enhanced emissions-reporting obligations

#### Primary potential financial impact

Increased indirect (operating) costs

#### **Company-specific description**

Regulation on EU Carbon Border Adjustment Mechanism (CBAM) entered into force on 17 May 2023 and will take effect from 1 October 2023 with a transition period until the end of 2025. It is expected that the EU Commission will formally adopt the Implementing Regulation later in 2023 after a vote in the CBAM Committee. In line with the EU's aggressive target to reduce GHG emissions by 55% until 2030 from 1990 baseline, CBAM on imported goods intends to stop companies moving investments outside the EU to avoid emissions standards, which is known as carbon leakage. The mechanism will apply to related goods originating in countries and territories outside of the EU and will cover some selected sectors which are at risk of carbon leakage that are covered by EU ETS. It would apply initially to steel, iron, cement, fertilizers, aluminum, and electricity.

Importers of these goods to the EU will have obligations to report on imported goods, embedded and indirect emissions. There will be a transition period between 1 October 2023- until 31 December 2025. As of 1 January 2026, there will be a gradual phase out of free allowances and importers of the goods in scope will have to purchase CBAM



certificates the price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in €/tons of CO2 emitted by imported goods within the scope of the regulation.

Arçelik has a washing machine and a refrigerator production facility in Romania under the operations of its subsidiary named as Arctic. A certain percentage of the steel used in production is imported from outside of the EU. Arctic, as an importer (reporting declarant) will have an obligation to report the volume and the embedded emissions on the imported steel in the transition phase. From 2026 onwards, CBAM certificates will need to be purchased over the respective EU ETS price.

#### **Time horizon**

Short-term

Likelihood Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

#### Potential financial impact figure (currency)

117,443,846

Potential financial impact figure - minimum (currency)

#### Potential financial impact figure - maximum (currency)

#### Explanation of financial impact figure

Please note that there are several assumptions behind the calculation which might be subject to change based on the formal adoption of the CBAM Delegated Acts concerning operational phase and possible revision of the scope of CBAM until 2026. The potential price of CBAM certificate is calculated by assuming a 97.5% free allowance in 2026 as indicated in the CBAM regulation (free allowances will be decreased by %2.5) over the embedded emissions from imported steel. It is also assumed that steel producers will take measures to decrease emissions in production. According to Eurofer's (European Steel Association) estimation, a 15% GHG emission reduction will be planned to be applied in 2026 over the current embedded emissions. The EU ETS price has been assumed to reach EUR 100 per ton CO2 in 2026. The potential cost up per product in case CBAM is applied after the reduction of free allowances and estimated decrease in GHG emissions is multiplied by the estimated number of washing machine and refrigerator quantities of production in Arctic (Romania) production plants.

#### Cost of response to risk

153,513,270



#### Description of response and explanation of cost calculation

It is highly likely that with the revision of EU ETS (decrease of emissions caps and gradual phase out of free allowances) and implementation of CBAM both EU and non-EU steel producers will need to implement measures to decrease their GHG emissions and improve their production methodologies with new technologies. Hence, we have taken into account a scenario based on estimated global steel prices of both green and regular flat steel products and we have estimated our cost increase according to the volume of necessary steel inputs for our production in 2026. It is also highly likely that efforts to make the steel production greener will result in cost increases. We have assumed a price per ton of 1,026 EUR for regular flat steel and a price per ton of EUR 1,188 for green steel. We have used an approach based on the sectoral estimations considering current data provided by World Steel Association for the forecasted price of regular flat steel and the Report prepared by ReThink Energy for the forecasted price of the green steel in 2026. We have multiplied the estimated steel consumption in 2026 for Arctic washing machines and refrigerators by the difference between the estimated global green steel price and the regular flat steel price in 2026.

#### Comment

We have assumed a price per ton of 1,026 EUR for regular flat steel and a price per ton of EUR 1,188 for green steel. We have used an approach based on the sectoral estimations considering current data provided by World Steel Association for the forecasted price of regular flat steel and the Report prepared by ReThink Energy for the forecasted price of the green steel in 2026. We have multiplied the estimated steel consumption in 2026 for Arctic washing machines and refrigerators by the difference between the estimated global green steel price and the regular flat steel price in 2026.

#### Identifier

Risk 2

#### Where in the value chain does the risk driver occur?

**Direct operations** 

#### **Risk type & Primary climate-related risk driver**

Emerging regulation Mandates on and regulation of existing products and services

#### Primary potential financial impact

Other, please specify

Reduced revenue from not being able to sell certain product groups with EPS packaging in France and Australia

#### **Company-specific description**

Arçelik produces and sells major domestic appliances such as dishwashers, washing machines, refrigerators, ovens, air conditioners as well as small domestic appliances such as coffee and tea machines, hair beauty product group, etc. Arçelik sells its products with plastic packaging and EPS (Styrofoam, styrene-based packaging) is predominantly used.



Some markets in which Arçelik operates like the UK and Spain have already introduced taxes on single use plastic packaging if the packaging does not contain a certain % of recycled plastic. In the UK, as of April 2022, all plastic packaging has to have at least 30% of recycled content and otherwise, a fee of pound 200 per tonnes is applied. In Spain, a similar regulation took effect in January 2023, with a fee of EUR 450 per tonnes. A similar regulation is also expected to enter into force in Italy, which is also planned on taxing the non-recycled plastic packaging used in the products. However, a more challenging regulation that completely bans styrene based plastic packaging has entered into force in France and is expected to enter into force in Australia. The regulation in France will be effective from January 2025 onwards and companies that have packaged goods with styrene packaging including EPS which is a type of styrofoam will not be able to sell products in France starting from 2025. The same type of ban on sale of goods including styrene packaging is expected to enter into force in the force in the force in Australia as of January 2026.

Arçelik has been proactively working on eliminating EPS on packaging with sustainable alternatives such as the recycled content. Although the designs for sustainable EPS free packaging prototypes have passed the tests for serial production, studies on certain product groups are still ongoing. Although it is a very low risk, there is still a risk that Arçelik might not be able to eliminate EPS on certain product groups, which would result in loss of revenue from not being able to sell these product groups to France and Australia.

#### **Time horizon**

Short-term

#### Likelihood

Very likely

### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

718,617,411

#### Potential financial impact figure – minimum (currency)

#### Potential financial impact figure - maximum (currency)

#### Explanation of financial impact figure

Please note that the potential risk figure is calculated based on a variety of assumptions which are subject to change as the regulations change and as Arçelik advances in removing EPS altogether in certain product groups with specific designs. Arçelik receives the right to revise the figures if needed. The potential additional cost figure has been calculated based on the assumption that once the EPS ban regulation takes place



in France in 2025 and Australia in 2026, Arçelik will not be able to sell certain product models because the company will not be able to eliminate the EPS used on certain product groups within the entire France and Australia sales range.

Potential loss of revenue: Potential loss of revenue in France in 2025 + Potential loss of revenue in Australia in 2026.

#### Cost of response to risk

73,034,755

#### Description of response and explanation of cost calculation

The sustainable packaging studies are carried out by an agile working group involving Sustainability, R&D, Product Management and Production divisions. Arçelik has launched an EPS free full product group range in IFA Fair in 2022 and the company is actively working to put into serial production the 100% EPS free and hybrid ranges in selected European countries in Q3 2023. Arçelik works on design of EPS free packaging together with its suppliers and up to date the company has switched to EPS free and 100% recycled cardboard and 100% recycled corrugated paper packaging in certain compressor, hob, hood, refrigerator, tumble dryer, coffee and tea machine and TV groups. We used 255 tons of 100% recycled and recyclable cardboard instead of EPS. We continue to work towards increasing the range of EPS hybrid and EPS free product ranges.

The cost of response to the EPS ban risk has been calculated as: (cost up per product category\* number of forecasted sales units in France in 2025) + (cost up per product category\* number of forecasted sales units in Australia).

#### Comment

Please note that the potential risk figure is calculated based on a variety of assumptions which are subject to change as the regulations change and as Arçelik advances in removing EPS altogether in certain product groups with specific designs. The sustainable packaging studies are carried out by an agile working group involving Sustainability, R&D, Product Management and Production divisions. Arçelik has launched an EPS free full product group range in IFA Fair in 2022 and the company is actively working to put into serial production the 100% EPS free and hybrid ranges in selected European countries in Q3 2023. Arçelik works on design of EPS free packaging together with its suppliers and up to date the company has switched to EPS free and 100% recycled cardboard and 100% recycled corrugated paper packaging in certain compressor, hob, hood, refrigerator, tumble dryer, coffee and tea machine and TV groups. We used 255 tons of 100% recycled and recyclable cardboard instead of EPS. We continue to work towards increasing the range of EPS hybrid and EPS free product ranges.

The cost of response to the EPS ban risk has been calculated as: (cost up per product category\* number of forecasted sales units in France in 2025) + (cost up per product category\* number of forecasted sales units in Australia).

Identifier Risk 3



#### Where in the value chain does the risk driver occur?

**Direct operations** 

#### Risk type & Primary climate-related risk driver

Market Uncertainty in market signals

#### Primary potential financial impact

Increased indirect (operating) costs

#### **Company-specific description**

Based on LCA studies, Arcelik's major impact on climate change is arising from the energy consumed during the use phase of the appliances sold. This is equivalent to almost 80% of Arcelik's Scope 3 impact. Scope 3 emissions make up almost 99% of the entire GHG emission footprint of Arcelik. Arcelik has near term 2030 approved Science Based Targets aligned with a well below 2-degree scenario. Accordingly, Arcelik will have to reduce its Scope 3 from the use phase of products by 15% in 2030 compared to 2018 base year. Please note that Arcelik has also committed to being a Net Zero company in 2050 according to the Science Based Targets Net Zero Standard. In order to comply with the SBTi Net Zero Standard, Arcelik will set a 1,5-degree aligned revised target which will be even more ambitious than the approved target. Keeping up with Arcelik's Science Based Targets is a very important commitment because investors, strategic retail customers and end users demand Arcelik to comply with its commitments. Strong belief in Arcelik's Science Based Targets has enabled the company to reach green financing with better interest rates. It has also enabled Arcelik to have strong credentials to develop better business relationships with its strategic B2B customers. To keep on track with the Science Based Targets commitment, Arçelik will have to invest heavily in R&D to produce the appliances more efficiently, which is very highly likely to result in increased cost up per product. There is a risk that Arcelik might not be able to reflect the cost increases per product to the sales price in case the competitors in the market do not follow a similar pattern. The market dynamics might force Arcelik to incur additional cost up, which would deteriorate the company's profitability

#### **Time horizon**

Short-term

#### Likelihood

Likely

#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 907,214,826

Potential financial impact figure - minimum (currency)



#### Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact figure**

Please note that the potential risk figure is calculated based on a variety of assumptions which are subject to change as the market dynamics changes. Arçelik receives the right to revise the figures if needed. The potential additional cost figure has been calculated based on the assumption that there will be a difference in terms of the % of energy efficient appliances put on the market by Arçelik and by its competitors and Arçelik will have to exceed the market average and put more energy efficient appliances on the market despite the cost up per product. If the competitors do not put as ambitious products in the market as Arçelik, the sales prices in the market will not increase and Arçelik might not be able to reflect the additional cost up arising from producing more energy efficient appliances in the sales price. According to market perceptions and the related targets, Arcelik sees that the product groups that are in the scope of this risk are identified as dishwashers and washing machines.

In such a case, there is a potential risk that Arçelik might not be able to reflect in the sales price the cost increases per product to make the appliances more efficient. The market dynamics and how the market will evolve will play a crucial role to understand the potential risk going forward. The figure is a cumulative figure for dishwasher and washing machine groups for the years between 2024-2029.

Potential increased costs: Number of products with higher efficiency levels exceeding market average \* cost up per product\* number of products sold in the specific year.

#### Cost of response to risk

241,377,622

#### Description of response and explanation of cost calculation

Arcelik invests heavily in R&D to produce energy efficient appliances with a lower cost to make the appliances affordable for the consumers. Increasing investments to innovate for energy efficient appliances via green financing also provides an opportunity to finance these investments in a cost-effective manner. Arcelik's energy efficient appliance R&D costs are financed within its EUR 350M green bond issued in international markets and the EUR 150M green loan from EBRD. Arcelik sets sustainability awareness targets for its brand managers to increase the sustainability index score of its major global brands Arçelik, Beko and Grundig. The user awareness campaigns such as Beko Shed That Carbon campaign which aims to inform consumers on how they can reduce their carbon footprint is an example of how a responsible marketing strategy. The GHG emission reduction targets aligned with the targets to keep with the Science Based Targets commitments are also included in the performance score cards of the C level, D level and manager level employees. Thanks to its global in-house R&D and its investments, Arcelik has introduced the A-10% 60 cm platform dishwasher that consumes 10% less energy than the best A energy class in the market in the EU and Türkiye markets. The patented Green and Clean technologies introduced with the Arcelik branded dishwashers in Türkiye market provides 25% more



energy savings in each wash compared to conventional models. The 9kg 1400 rpm A-30% washing machine introduced in the EU markets is also a very distinguished energy efficient model, 30% more efficient than the best A energy class in the market. Such efforts made in R&D investments to produce more efficient dishwashers and washing machines will be a way to innovate for increased energy efficiency with a lower cost up per product.

The total cost of the response to risk is a sum of Beko brand marketing expenses and the cost of R&D expenditures for washing machine and dishwasher products in 2022 fiscal year.

#### Comment

Please note that the potential risk figure is calculated based on a variety of assumptions which are subject to change as the market dynamics change.

Potential increased costs: Number of products with higher efficiency levels exceeding market average \* cost up per product\* number of products sold in the specific year. The total cost of the response to risk is a sum of Beko brand marketing expenses and the cost of R&D expenditures for washing machine and dishwasher products in the 2022 fiscal year.

#### Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Chronic physical Water scarcity

#### Primary potential financial impact

Other, please specify Decrease in contribution margin due to potential production loss

#### **Company-specific description**

In a potential scenario where, global warming cannot be reduced to "Well below 2°C" and eventually to "1.5°C", companies will face financial and operational risks arising from physical risks in relation to excessive global warming, which is expected to be between 2.6°C and 4°C based on the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCPs). Arçelik received consultancy services from S&P which uses TruCost Methodology. S&P Trucost Methodology reviewed Arçelik and its significant suppliers' water stress risk at an asset level, taking into consideration climate hazard indicators such as water stress, flood, heat waves, cold waves, hurricane, and sea-level rise, and their impact on Arçelik's operations. The Low, Moderate and High RCPs have been taken into consideration with a forecast for the 2030 and 2050 fiscal years from a 2020 baseline. According to the Trucost Physical Risk assessment, Arçelik's overall physical risk score is moderate, the main risk being



water stress. India, Romania, and Türkiye (Ankara and Çayırova) sites have been pointed as sites prone to high water stress risk.

Arçelik also carries out internal water risks assessment at global sites annually using WRI Aqueduct Water Risk Atlas. Based on Arçelik's internal risk calculations taking into account the High, Moderate and Low RCP scenario analysis, water stress risks have been found to have an extreme impact mainly on Turkey and Pakistan plants. Although it is more likely than not, the potential contribution loss as a result of not being able to produce products due to water shortages from extreme water stress is a potential long-term risk faced especially by Arçelik's facilities prone to extreme water scarcity risks.

#### **Time horizon**

Medium-term

#### Likelihood

More likely than not

Magnitude of impact Medium

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

176,225,610

#### Potential financial impact figure – minimum (currency)

#### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

Please note that the figure indicated here is based on High, Medium, and Low global warming assumptions and are prone to change based on changing circumstances on global warming and Arçelik reserves the right to revise calculations if needed. We have used the risk factors from the RCP 4.5 global warming scenario for the possible production losses. All of Arcelik's plants are evaluated based on this scenario and the plants that pose a significant risk are determined based on the following criteria: 1) Plants indicated as Extremely High in overall water risk results by using WRI Aqueduct Water Risk Atlas a.

2) Plants located in a basin that Water stress (Water demand/ Water supply) is above %100

3) Plants that have a water withdrawal volume higher than 10% of Arçelik total water withdrawal volume

As a result, we determined that only 1 of Arçelik's facilities can be deemed as bearing a water stress risk with the potential to have a substantive financial or strategic impact on our business. This plant, which is Eskisehir Refrigirator Plant, is analyzed in terms of its estimated production units, costs and the potential production losses due to water stress



for the year 2030.

The potential contribution loss in a Low warming scenario has been quantified by factoring the potential production loss due to lack of water in m3 that is required for production in 2030. The financial impact is calculated by taking into account the loss of gross profit per product.

Potential financial impact figure = (Potential units of production loss) \* (Loss of gross profit per unit)

#### Cost of response to risk

34,893,113

#### Description of response and explanation of cost calculation

We work to identify water risks and invest to increase water recycling and reuse, and to reduce water withdrawal. In 2022, we saved a total of 176,984 m3 of water, thanks to water efficiency and rainwater harvesting projects. We have publicly available targets to reduce water consumption per product in production by 45% in 2030 compared to 2021 baseline. Additionally, as a response to the water stress risk from physical risks scenarios carried out, we have set a 70% water recycling target in global manufacturing operations. The cost of response to risk (34,893,113 TL) is the amount equal to the sustainable water management expenditures made in 2022 which are financed by Arçelik's EUR 350M green bond.

#### Comment

Please note that the figure indicated here is based on High, Medium, and Low global warming assumptions and are prone to change based on changing circumstances on global warming and Arçelik reserves the right to revise calculations if needed. We have used the risk factors from the RCP 4.5 global warming scenario for the possible production losses.

Potential financial impact figure = (Potential units of production loss) \* (Loss of gross profit per unit)

The cost of response to risk (34,893,113 TL) is the amount equal to the sustainable water management expenditures made in 2022 which are financed by Arçelik's EUR 350M green bond.

#### Identifier

Risk 5

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Reputation

Increased stakeholder concern or negative stakeholder feedback

#### Primary potential financial impact

Decreased access to capital

#### **Company-specific description**



As Arçelik, we benefit from a EUR 500 million green financing consisting of a EUR 350 million green bond and a EUR 150 million green loan with better borrowing conditions. We have issued a green bond with a nominal value of EUR 350 million and a five-year maturity. The bond attracted a high level of demand from investors – being almost five times oversubscribed. More than 145 investors have invested in the bond, the coupon rate of which was determined as 3.00%. With this fund, we finance Eligible Green Projects including energy-efficient, eco-efficient, and circular economy-adapted products and the promotion of energy efficiency in production. The proceeds support the company's investments in energy and water efficient products, energy efficiency in production, sustainable water and wastewater management, pollution control and prevention, renewable energy, and green building initiatives. We also obtained a EUR 150 million green loan from EBRD (European Bank of Reconstruction and Development) with an 8-year term. We plan to implement projects to achieve net-zero emissions in the value chain by 2050 through financing environmental Sustainability and R&D projects within the framework of the provided green loan.

The green financing provided to Arçelik shows the investor and financing institutions' confidence in Arçelik to execute its green transformation strategy including but not limited to its near term and Net Zero Science Based Targets commitments and other environmental commitments to increase renewable energy installed capacity and to decrease energy and water consumption in production. Arçelik's ESG claims have been backed by strong third-party credentials such as receiving the highest score in its sector in the Dow Jones Sustainability Indices or being included in the Corporate Knights 100 Most Sustainable Companies List. In case Arçelik fails to keep up with its ESG commitments, although a low risk, there is a risk that Arçelik might lose its credibility which would decrease the appetite to invest in the company's green bonds or to provide the company the green financing options with better borrowing conditions. In such a scenario, Arçelik might incur a potential increase in the cost of borrowing.

#### **Time horizon**

Long-term

#### Likelihood

Unlikely

#### Magnitude of impact

Medium

#### Are you able to provide a potential financial impact figure? Yes, a single figure estimate

#### Potential financial impact figure (currency)

335,914,073

#### Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)



#### **Explanation of financial impact figure**

The figure quantified here is based on a number of assumptions and might change based on the changes in the borrowing environment. Arçelik reserves the right to revise the figure if needed.

The potential financial impact has been calculated as: The difference between interest rate of a conventional loan vs green financing interest rate multiplied by the EUR 500 million green financing obtained.

#### Cost of response to risk

12,337,550

#### Description of response and explanation of cost calculation

In line with its strategy to put sustainability at the core strategy of operations, Arçelik keeps investing in energy efficiency in production, renewable energy installments, producing energy and resource efficient products. Arçelik will continue to finance its green investments on the way to net zero via green financing options. There is an interdependent relationship between keeping up with the green commitments and getting access to green financing. The success of the company's green transformation commitments such as its approved Science Based Targets and the Net Zero commitment depends on access to green financing alternatives. Thus, the company will look forward to increasing its green investments and to finance these investments via green financing solutions. The cost of response to risk is the total costs incurred during the Green Bond issuance in 2021 in terms of Second Party Opinion advisory services and the green bond issuance banking advisory services.

#### Comment

The potential financial impact has been calculated as: The difference between interest rate of a conventional loan vs green financing interest rate multiplied by the EUR 500 million green financing obtained.

The cost of the response to risk is the total costs incurred during the Green Bond issuance in 2021 in terms of Second Party Opinion advisory services and the green bond issuance banking advisory services.

#### Identifier

Risk 6

#### Where in the value chain does the risk driver occur?

**Direct operations** 

#### Risk type & Primary climate-related risk driver

Emerging regulation Carbon pricing mechanisms

#### Primary potential financial impact

Increased indirect (operating) costs

#### **Company-specific description**



Currently, we do not have any obligations under any carbon pricing mechanism, as there are no carbon pricing mechanisms in place in the countries we operate in for our industry. On the other hand, increasing decarbonization efforts accelerate the use of these mechanisms. For example, a market-based carbon pricing mechanism is being planned in Turkey. If we get involved in such mechanisms, the additional cost that we face might create a disadvantage for our cost-competitiveness.

In order to be ready for such regulations and minimize the potential financial burden we might face in the future; we take action to reduce our Scope 1-2 GHG emissions globally. In line with our approved Science Based Targets, we aim to decrease our Scope 1-2 emissions by 30% by 2030 from the 2018 base year. We outlined a detailed roadmap to reach this goal which includes renewable energy investments, implementing energy efficiency projects and purchasing green electricity certificates. Dedicated inhouse teams monitors the development regarding these targets and organize and take necessary actions.

Even though the trends regarding ETS mechanism signals that a regulation for household appliances is not likely in the near future, Arçelik calculates its possible ETS-related risk based on the unlikely scenario that it will be subject to a regulation in 2030 in order to prepare in advance.

#### **Time horizon**

Medium-term

Likelihood Unlikely

#### Magnitude of impact

Low

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

#### Potential financial impact figure (currency)

107,962,677

Potential financial impact figure - minimum (currency)

#### Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact figure**

Financial impacts are calculated according to an unlikely scenario of Arçelik being subject to ETS mechanism in 2030 for all of its operations. Arcelik's estimated Scope 1-2 emissions for the year 2030 is 91,841 tCO2e considering green electricity, renewable energy and energy efficiency efforts. Please note that in a business-as-usual scenario where no decarbonizations efforts would be made, the emissions would reach to 383,444 tCO2e The carbon tax that Arçelik would face in 2030 is estimated as 68 € per ton CO2e according to the global average prices based on World Bank Carbon Pricing



#### Dashboard.

Potential financial impact figure = (Scope 1-2 emissions in 2030) \* (68 €/tCO2e), converted to Turkish Liras

#### Cost of response to risk

2,255,773,865

#### Description of response and explanation of cost calculation

In order to minimize this risk, Arçelik aims to decrease its Scope 1-2 GHG emissions in line with the targets which are approved by Science-Based Targets Initiative (SBTi) by 30% as of 2030. Dedicated sustainability teams, together with responsible from R&D and production facilities, work towards these goal with the oversight of Arçelik Sustainability Council which is led by the CFO. Arçelik takes proactive action against this risk by investing in decarbonization already by now and monitoring the improvements. Thanks to these efforts Arcelik's estimated Scope 1-2 emissions for 2030 is calculated as 91,842 tonCO2e instead of a business-as-usual estimated value of 382,444 tonCO2e.

Arçelik plans to invest  $1,528,764 \in$  for green electricity certificates;  $52,234,987 \in$  for energy-efficiency projects and  $76,085,139 \in$  for renewable energy investments for the period 2022-2030 in order to create a cumulative decarbonization impact. Cost of response to risk = 1,528,764 + 52,234,987 + 76,085,139, converted to Turkish Liras

#### Comment

Please note that financial impacts are calculated according to an unlikely scenario of Arçelik being subject to ETS mechanism in 2030 for all of its operations.

Potential financial impact figure = (Scope 1-2 emissions in 2030) \* (68 €/tCO2e), converted to Turkish Liras

Cost of response to risk = 1,528,764 + 52,234,987 + 76,085,139, converted to Turkish Liras

#### Identifier

Risk 7

#### Where in the value chain does the risk driver occur?

**Direct operations** 

#### Risk type & Primary climate-related risk driver

Emerging regulation Mandates on and regulation of existing products and services

## Primary potential financial impact

Other, please specify Decreased access to markets

#### **Company-specific description**



In line with global decarbonization efforts and the combat against climate change, emissions from households are becoming a more important component since households are a major source of energy consumption globally. According to 2020 European Commission data, households account 27.4% of total energy consumption of EU. Since household appliances constitute nearly 40% of this consumption, regulations regarding energy-efficiency performance of appliances are growing globally. EU introduced energy labelling requirements which will make it impossible for certain products with F energy-efficiency level or lower to be sold in the European market beginning from 2024.

With the awareness of this trend and risk, Arçelik in-house teams closely monitor the minimum energy-efficiency level requirements globally, especially in the regions where Arçelik has operations and trade relations in order not to lose sales. However, this risk is very unlikely in real life since Arçelik takes proactive action for upcoming regulations and make sure its products are in line with the requirements. In terms of upcoming EU Energy Labelling regulations that will be effective in 2024, all of Arcelik's related products are already transformed to be in line with the standards.

In addition, replacing low energy-efficient performance products with more energyefficient ones is crucial for Arcelik's approved Science Based Targets. Almost 80% of Arçelik's Scope 3 GHG emissions footprint is related to the use phase of the products during their lifetime. For this reason, Arçelik has the target of decreasing its Scope 3 emissions from the use phase of sold products by 15% by 2030 from a 2018 base year. On the other hand, these energy-efficiency improvement efforts bring material and R&D costs. Thus, in order to stay in line with regulations and our SBTs, we face additional costs.

#### **Time horizon**

Short-term

#### Likelihood

Very unlikely

#### Magnitude of impact

High

# Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

## Potential financial impact figure (currency)

14,386,356,738

#### Potential financial impact figure – minimum (currency)

## Potential financial impact figure - maximum (currency)

#### Explanation of financial impact figure

In case of Arçelik cannot comply with 2024 EU Energy Labelling requirements, Arçelik wouldn't be able to sell its products in EU that do not comply with the new regulation.



This would mean losing the revenue for the defined products in 2024 which accounts for 828,120,441 €. However, this risk doesn't exist in real life since all necessary improvements are already completed for products to comply. The potential financial impact figure (currency) has been calculated by converting 828,120,441 € to Turkish Lira as 14,386,356,738.

# Cost of response to risk

548,909,924

# Description of response and explanation of cost calculation

In order to stay in-line with emerging energy-efficiency regulations and stay on track with its SBTs, Arçelik conducts projects and makes investments for product energy improvements. In 2022 30,278,238 € is spent on efforts to decrease Scope 3 emissions related to the product groups prone to new 2024 EU Regulation. In addition, Arçelik closely follows the upcoming regulations and conducts lobbying activities in sectoral associations in order to manage the regulatory risks in advance. The total cost of involvement in sectoral associations in 2022 is 1,318,610 €.

Cost of Response to Risk=  $30,278,238 + 1,318,610 = 31,596,848 \in$ , converted to Turkish Lira

# Comment

The potential financial impact figure (currency) has been calculated by converting  $828,120,441 \in$  to Turkish Lira as 14,386,356,738.

Cost of Response to Risk= 30,278,238 + 1,318,610 = 31,596,848 €, converted to Turkish Lira as 548,909,924.

# C2.4

# (C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

# C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

# Identifier

Opp1

Where in the value chain does the opportunity occur? Downstream

Opportunity type

Markets

# Primary climate-related opportunity driver

Access to new markets



# Primary potential financial impact

Increased revenues through access to new and emerging markets

### **Company-specific description**

Production and sales of energy-efficient products is an important strategy for Arçelik in terms of our sustainability vision. Currently, 49.4% of our turnover comes from energy-efficient products. Sales of energy-efficient products within the sector mostly concentrate on regions such as Europe due to increased customer awareness which result in more sustainable preferences and the purchasing power capability. However, in line with Arçelik's Net Zero commitment to the Science Based Targets Initiative, the company aims to follow a strategy to provide energy efficient appliances ahead of legislation in the developing countries where Arçelik operates such as South Africa, Pakistan, India, and Bangladesh. Arçelik has an important opportunity to make energy-efficient product sales in such regions. Arçelik is already selling energy-efficient products in nearly 70 less developed and developing countries and has the potential to expand this scope.

Following the acquisition of DEFY, South Africa in 2011, Arçelik invested heavily in R&D and innovation to increase energy-efficient appliances put on the market despite lack of regulations and the costs. Arçelik enabled the faster introduction of energy efficiency requirements in the market and increased the average energy-efficiency levels of the products from E class to A in 5 years. Now, the company has upgraded Arçelik's refrigerator product range to A+. The gap between what the company offers at minimum and the legal limit speaks of more than a 40% energy saving.

Previous experiences such as the example in South Africa can be copied in other emerging markets. Arçelik considers the low penetration rates and the lack of regulations in certain markets as an opportunity to educate customers on the importance of energy-efficient appliances and expanding its market reach. Arçelik is aware of the opportunity that it can lead such markets with energy-efficient products

#### **Time horizon**

Medium-term

#### Likelihood

Likely

# Magnitude of impact

High

# Are you able to provide a potential financial impact figure? Yes, a single figure estimate

# Potential financial impact figure (currency)

11,995,077,389

Potential financial impact figure – minimum (currency)

Potential financial impact figure - maximum (currency)



## Explanation of financial impact figure

In 2022, energy-efficient products are sold to nearly 70 developing countries. The total revenue generated from these sales amount to 690,471,463 €, converted into Turkish Lira

#### Cost to realize opportunity

682,140,361

#### Strategy to realize opportunity and explanation of cost calculation

In order to be able to provide energy-efficient products to emerging markets, more energy-efficient products are being tried to be developed through R&D activities. In 2022, R&D spending on energy-efficient product efforts amount to 39,265,979 €, converted into Turkish Lira as 682,140,361.

#### Comment

By closely monitoring the less developed and developing markets, Arçelik aims to seize the opportunity to grow its energy-efficient product reach to wider geographies and create a business advantage.

#### Identifier

Opp2

Where in the value chain does the opportunity occur? Downstream

#### **Opportunity type**

Markets

#### Primary climate-related opportunity driver

Other, please specify Development of new products or services through R&D and innovation

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### **Company-specific description**

With the growing importance of climate-related risks, consumers' awareness and sensitivity regarding the low carbon footprint is increasing. This leads consumer to demand and prefer more resource-efficient, climate-friendly products. Since there is already a market demand for energy-efficient household appliances in line with these trends, there is a financial opportunity of increasing sales of these product groups. Arçelik holds an opportunity since it already has a wide energy-efficient product portfolio and is already making energy-efficient product sales. In 2022, 49.4% of Arcelik's turnover came from energy-efficient products. We decreased the average energy consumption of our washing machines by 8.2%, and the energy usage of our tumble dryers, refrigerators, and dishwashers by 4.7%, 0.2%, and 0.4%, respectively compared to the previous year in Türkiye. As examples of leading energy-efficient products introduced in the market in 2022:



• A-10% 60 cm platform dishwasher that consumes 10% less energy than the best A energy class in the EU and Türkiye markets

• The patented Green and Clean technologies introduced with the Arçelik branded dishwashers in Türkiye market that provides 25% more energy savings in each wash compared to conventional models

• The 9kg 1400 rpm A-30% washing machine introduced in the EU markets which is 30% more efficient than the best A energy class in the market.

Arçelik also has the advantage to make these improvements with less cost-up reflected to products with the help of cost-effective investments to innovate for energy efficient appliances via green financing

#### **Time horizon**

Short-term

#### Likelihood

Likely

#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

66,144,615,973

#### Potential financial impact figure - minimum (currency)

### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

Arçelik is already actively making energy-efficient product sales. In 2022, total turnover generated from energy-efficient products amounts to 3,807,476,038 €, converted into Turkish Lira as 66,144,615,973.

## Cost to realize opportunity

682,140,361

#### Strategy to realize opportunity and explanation of cost calculation

In order to be able to realize the opportunity of growing demand for energy-efficient products, Arçelik will need to meet the market demand. For this reason, Arçelik continuously works on energy performance improvements in products via R&D studies. In 2022, the total budget spent on energy-efficient product R&D expenditure amounts to 39,265,979 €, converted into Turkish Lira

#### Comment



Arçelik has a market opportunity with a wide range of energy-efficient product portfolios and continuous efforts to expand this portfolio even further. In addition, this also contributes to Arcelik's SBTs by helping to decrease its Scope 3 emissions.

Identifier

Opp3

Where in the value chain does the opportunity occur? Direct operations

**Opportunity type** 

Resilience

#### Primary climate-related opportunity driver

Resource substitutes/diversification

#### Primary potential financial impact

Other, please specify Access to favorable financing conditions

#### **Company-specific description**

We benefit from a EUR 500 million green financing consisting of a EUR 350 million green bond and a EUR 150 million green loan with better borrowing conditions. We have issued a green bond with a nominal value of EUR 350 million and a five-year maturity. The bond attracted a high level of demand from investors – being almost five times oversubscribed. More than 145 investors have invested in the bond, the coupon rate of which was determined as 3.00%. With this fund, we finance Eligible Green Projects including energy-efficient, eco-efficient, and circular economy-adapted products and the promotion of energy efficiency in production. The proceeds support the company's investments in energy and water efficient products, energy efficiency in production, sustainable water and wastewater management, pollution control and prevention, renewable energy, and green building initiatives. We also obtained a EUR 150 million green loan from EBRD (European Bank of Reconstruction and Development) with an 8 year term. We plan to implement projects to achieve net-zero emissions in the value chain by 2050 through financing environmental Sustainability and R&D projects within the framework of the provided green loan.

The green financing provided to Arçelik shows the investor and financing institutions' confidence in Arçelik to execute its green transformation strategy including but not limited to its near term and Net Zero Science Based Targets commitments and other environmental commitments to increase renewable energy installed capacity and to decrease energy and water consumption in production. Arçelik's ESG claims have been backed by strong third-party credentials such as receiving the highest score in its sector in the Dow Jones Sustainability Indices or being included in the Corporate Knights 100 Most Sustainable Companies List.

These strong credentials have enabled us to access better financing conditions with a reduced interest rate compared to cost of borrowing on conventional loans

ARÇELİK A.Ş. CDP Climate Change Questionnaire 2023 27 July 2023



# Time horizon

Short-term

Likelihood Very likely

# Magnitude of impact

Medium

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

# Potential financial impact figure (currency) 335,914,073

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

# Explanation of financial impact figure

Green financing options provide lower interest rates compared to conventional credit alternatives in order to support to green transformation of business. Thus, using green financing provides a financial opportunity for Arçelik. In order to see this impact, the difference between the total rate of interest to be paid yearly for EBRD Green Loan and Green Bond of Arçelik and the interest to be paid to a same amount of regular credit was calculates. Thus, green financing provides an opportunity for Arçelik. Financial Impact = (Yearly interest that would be paid with regular credits) - (Yearly interest paid to EBRD and Green Bond)

# Cost to realize opportunity

12,337,550

# Strategy to realize opportunity and explanation of cost calculation

In line with its strategy to put sustainability at the core strategy of operations, Arçelik keeps investing in energy efficiency in production, renewable energy instalments, producing energy and resource efficient products. Arçelik will continue to finance its green investments on the way to net zero via green financing options. There is an interdependent relationship between keeping up with the green commitments and getting access to green financing. The success of the company's green transformation commitments such as its approved Science Based Targets and the Net Zero commitment depends on access to green financing alternatives. Thus, the company will look forward to increasing its green investments and to finance these investments via green financing solutions. The cost to realize opportunity is the total costs incurred during the Green Bond issuance in 2021 in terms of Second Party Opinion advisory services and the green bond issuance banking advisory services.

# Comment



Green financing options provide lower interest rates compared to conventional credit alternatives in order to support to green transformation of business. Thus, using green financing provides a financial opportunity for Arçelik. In order to see this impact, the difference between the total rate of interest to be paid yearly for EBRD Green Loan and Green Bond of Arçelik and the interest to be paid to the same amount of regular credit was calculated. Thus, green financing provides an opportunity for Arçelik. 12,337,550 Turkish Lira is the cost to realize the opportunity is the total costs incurred during the Green Bond issuance in 2021 in terms of Second Party Opinion advisory services and the green bond issuance banking advisory services.

#### Identifier

Opp4

Where in the value chain does the opportunity occur? Direct operations

#### **Opportunity type**

Energy source

#### Primary climate-related opportunity driver

Use of lower-emission sources of energy

#### Primary potential financial impact

Reduced indirect (operating) costs

#### **Company-specific description**

With the likely introduction of ETS mechanisms, reducing scope 1-2 emissions becomes an important leverage in order to minimize the potential risks of carbon tax. With this awareness, Arçelik aims to increase its use of renewable energy in order to reduce the future carbon tax cost. In addition, using its own renewable energy sources will allow Arçelik to reduce the cost of green electricity certificates and make savings from the amount paid to the grid. Arçelik holds an opportunity since it has a plan to establish renewable energy systems with 50MW capacity and a target of increasing the green electricity ratio to 100% in all countries where we have production facilities by 2030. In addition, Arçelik also commits to make a minimum USD 50 million investment in renewable energy and energy efficiency.

In 2022, our green electricity covered 65% of our global operations which is in line with our target. Türkiye and Romania manufacturing plants purchased 100% green electricity. Arçelik Hitachi Thailand plant met approximately 23% of its annual electricity consumption from a long term PPA with floating solar PV plant in 2022. With the different technologies we have in some of our factories such as photovoltaics, concentrated solar power and a solar wall, we reached a total of 10.20 MW solar plant capacity as of the end of 2022. In 2022, we generated 10,762 GJ of electricity and prevented 1,258 tonnes of CO2e emissions.

#### **Time horizon**

Medium-term



# Likelihood

Very likely

## Magnitude of impact

High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

# Potential financial impact figure (currency)

2,149,613,067

# Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

# Explanation of financial impact figure

Thanks to Arcelik's renewable energy investments and road plan, Arçelik will save 102,696,622 € from the cost paid to grid, have reduction from green electricity certificate cost by 281,650 € and reduce carbon tax risk by 20,759,694 € for the years 2022-2030. The data for future years (2023-2030) is estimated by taking the production projections of Arçelik and changing costs of grid, green electricity certificates and carbon tax per tCO2e according to market trends.

Potential financial impact = 102,696,622 + 281,650 + 20,759,694 = 123,737,966 €, converted into Turkish Lira

# Cost to realize opportunity

1,386,865,193

# Strategy to realize opportunity and explanation of cost calculation

In order to seize the opportunity of cost saving from grid payment, green electricity certificates and carbon tax, Arçelik needs to realize the planned renewable energy investments. For the time period 2022-2026, Arçelik plans to invest 79,831,985 € (1,386,865,193 TL) in renewable energy projects.

# Comment

Potential financial impact = 102,696,622 + 281,650 + 20,759,694 = 123,737,966 €, converted into Turkish Lira

In order to seize the opportunity of cost saving from grid payment, green electricity certificates, and carbon tax, Arçelik needs to realize the planned renewable energy investments. For the time period 2022-2026, Arçelik plans to invest 79,831,985 € (1,386,865,193 TL) in renewable energy projects.

Identifier Opp5

Sensitivity: Internal / Non-Personal Data



## Where in the value chain does the opportunity occur?

Downstream

### **Opportunity type**

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased diversification of financial assets

#### **Company-specific description**

As more actors in the business environment commit to net zero targets, carbon credits are becoming more in demand since many companies would not be able to reach net zero with only emission reduction activities and will be in need of buying carbon credits. This led to the construction of a voluntary carbon credit market where companies buy and sell credits. This market is likely to gain importance and the credit prices per tCO2e are likely to increase. Arçelik has an opportunity regarding this development since Arçelik actively follows the market, credits that are for sale, newly emerging projects and facilitating platforms. This brings a familiarity to Arçelik with the system. More importantly, Arçelik is an active player of the market since Arçelik has a certified carbon credit. The project started in 2013 and involved enhanced energy efficient refrigerators. The project is developed, financed, and implemented by Arçelik A.Ş. The emission reductions available is 49.764 tCO2e. This reduction is VCS-certified.

#### **Time horizon**

Medium-term

#### Likelihood

Likely

#### Magnitude of impact

Low

# Are you able to provide a potential financial impact figure? Yes, a single figure estimate

# Potential financial impact figure (currency)

4,322,576

#### Potential financial impact figure – minimum (currency)

#### Potential financial impact figure – maximum (currency)

### **Explanation of financial impact figure**

Arçelik has a 305,407 tCO2e emission reduction with a VCS certified that can be sold in the voluntary carbon markets. According to the global carbon credit average values per tCO2e, we estimate that the cost can be 5€ per tCO2e, if sold in short-term. This holds a



potential financial opportunity.

Potential financial impact = 305,407 \* 5 = 1,527,035, converted into Turkish Lira

#### Cost to realize opportunity

613,529

#### Strategy to realize opportunity and explanation of cost calculation

In order to realize this opportunity, Arçelik invested in energy-efficient refrigerator project and the development cost amounted to 35,319 €, converted into Turkish Lira

#### Comment

Potential financial impact = 305,407 \* 5 = 1,527,035, converted into Turkish Lira In order to realize this opportunity, Arçelik invested in energy-efficient refrigerator project and the development cost amounted to  $35,319 \in$ , converted into Turkish Lira

#### Identifier

Opp6

#### Where in the value chain does the opportunity occur?

**Direct operations** 

#### **Opportunity type**

Products and services

#### Primary climate-related opportunity driver

Ability to diversify business activities

#### Primary potential financial impact

Other, please specify Increased revenue through a new line of products

#### **Company-specific description**

The importance of renewable energy is increasing in the world where climate goals and decarbonization is becoming more crucial. Solar power is an important source of renewable energy. With this knowledge, Arçelik has been using solar power as a source of energy. which can generate. As of 2022, Arçelik has reached 10,20 MW capacity of solar power plants in some of Turkey and Thailand, South Africa, Romania and Pakistan facilities and these solar power plants have the capacity to produce 21,000 MWh of electricity per year.

Arçelik has started domestic production of panels with an investment of 10 million € in this field aims to produce 550,000 units of solar panels in a year. This bears the opportunity to support the increase in the use of renewable energy in Turkey and the reduction of foreign dependency against possible supply chain disruptions. As there is already a considerable demand for panels in Turkey and Europe, being a supplier of panels will bring a financial opportunity.

At Arçelik facilities, the panels produced by Arçelik will be used and the demand of other Koç Holding companies -which is the parent of Arçelik- are likely to be met by Arçelik



products. Any other buyers from both Turkey and international markets, especially Europe are possible customers as well.

## Time horizon

Short-term

Likelihood Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

4,343,075,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

# Explanation of financial impact figure

With the solar panels that will be put on market beginning from September 2023, Arçelik plans to supply these to markets. The estimated financial gain is around  $250,000,000 \in$  from solar power business in a year.

# Cost to realize opportunity

173,723,000

# Strategy to realize opportunity and explanation of cost calculation

In order to realize the solar power business, Arçelik made a 10,000,000 € investment.

# Comment

With the solar panels that will be put on market beginning from September 2023, Arçelik plans to supply these to markets. The estimated financial gain is around  $250,000,000 \in$  from solar power business in a year.

In order to realize the solar power business, Arçelik made a 10,000,000 € investment.

# **C3. Business Strategy**

# C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1



# **Climate transition plan**

Yes, we have a climate transition plan which aligns with a 1.5°C world

# Publicly available climate transition plan

Yes

# Mechanism by which feedback is collected from shareholders on your climate transition plan

Our climate transition plan is voted on at AGMs and we also have an additional feedback mechanism in place

# **Description of feedback mechanism**

In addition to sharing/voting our 1.5°C aligned transition plan at AGMs, we receive questions/opinions from our shareholders or investors and arrange meetings for their feedback about our climate-related transition plans and reports.

# Frequency of feedback collection

More frequently than annually

# Attach any relevant documents which detail your climate transition plan (optional)

Arcelik's Climate Strategy

Uclimate\_change\_strategy.pdf

# C3.2

# (C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative	

# C3.2a

# (C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-	Scenario	Temperature	Parameters, assumptions, analytical choices
related	analysis	alignment of	
scenario	coverage	scenario	
Physical climate scenarios RCP 4.5	Company- wide		Based on S&P Trucost Physical Risk Analysis outcome, water stress was the main risk for Arçelik and its suppliers in terms of global warming related physical disruption risks. To deep dive into this issue, Arçelik applied an extensive water stress risk testing based on internal expertise and WRI Aqueduct Water Risk Atlas for global operations. The global warming scenario RCP 4.5 has been used for the year 2030 and is integrated for substantive financial or strategic impact calculations. In this scenario, we assume that



Physical	Company-	1.6°C – 2°C	energy related SDGs are met and current net zero pledges are mostly achieved. Arçelik's policy related, market, new technology risks would increase but climate adaptation risks are minimized. The revenue and production growth are assumed to be impacted limited by the major global warming issues and due to lower impact on GDP, the demand to products are expected to increase. Arcelik identified a criteria to decide which locations shall be deemed as at significant risk and must be included into the water stress risk analysis. The criteria is as follows 1) Plants indicated as Extremely High in overall water risk results by using WRI Aqueduct Water Risk Atlas. 2) Plants located in a basin that Water stress (Water demand/ Water supply) is above %100 3) Plants that have a water withdrawal volume higher than 10% of Arçelik total water withdrawal volume The plants that meet all of the criteria above are assumed to lose production according to RCP 4.5 in year 2030. All of our plant locations are analyzed according to these parameters, assumptions and data. As a result, we determined that only 1 of Arçelik's facilities can be deemed as bearing a water stress risk with the potential to have a substantive financial or strategic impact on our business. This plant, which is Eskisehir Refrigirator Plant, is analyzed in terms of its estimated production units, costs and the potential production losses due to water stress for the year 2030. With the awareness of its water stress risk, Arçelik has invested and will continue to invest in water efficiency and water recycling projects within the scope of its Green Bond issued in 2021 and its green loan borrowed from the European Bank of Reconstruction and Development (EBRD). Arçelik has received commitment letters from more than 180 of its high volume selected suppliers that these suppliers would set their own publicly available water reduction and recycling targets as of the end of 2023.
climate scenarios Customized publicly available	wide		analysis for its own operations as well as of its selected suppliers to understand the damage to assets, interruption of operations and disruption to supply chains based on different climate warming scenarios and timelines. An asset level approach has



physical	been adopted at the company and portfolio level
scenario	based on three time periods (2020 baseline, 2030 and
	2050) and three climate scenarios (RCP 2.6, 4.5 and
	8.5) to model the magnitude and
	the potential impact of both acute and chronic
	physical risks on company financials and operations.
	Private Trucost owned datasets as well as other
	datasets including but not limited to WRI Aqueduct,
	CMIP5 multimodel-average, NOAA and Climate
	Central have been used. Considered hazards: flood,
	water stress, heatwave, cold wave, hurricanes, sea
	level rise and wildfires.
	Considered factors:
	• Excess Heat Factor (EHF) and Excess Cold Factor
	(ECF) Index to measure heatwave occurrence and
	intensity
	Baseline Water Stress Index to measure total water
	withdrawals to the available water sources
	Burnt Area in terms of wildfires, Riverine Flood Risk
	in terms of floods
	Coastal Inundation in terms of sea level rise
	Hurrican Index to measure the frequency and
	intensity of hurricanes.
	5 analytical approaches have been considered:
	Climate Hazard Mapping, Physical Asset Geolocation
	and Corporate Ownership Mapping, Asset and
	Company Level Physical Risk Scoring, Revenue
	Exposure Based on Physical Risk Estimation and
	Composite Score
	In addition Arcelik in-house team conducted a
	location-based scenario analysis on water stress risk
	using WRI Aqueduct
	Results:
	Arçelik and its suppliers are exposed to a moderate
	level of physical risk with greatest exposure to water
	stress, heat wave and cold wave.
	Certain production locations are at serious risk in all
	scenarios.
	As water stress is the biggest risk factor, Arcelik has
	a target to increase water recycling ratio to 70% in
	global operations as of 2030. At the supplier level,
	Arçelik has collected a signed commitment letter from
	more than 173 of its core $\pm 450$ suppliers to have set
	than 173 of its core +450 suppliers to have set
	publicly available water reduction/recycling targets no



		later than the end of 2023 in their sustainability
		reports/websites
Transition scenarios IEA STEPS (previously IEA NPS)	Company- wide	
		<ul> <li>a lower cost.</li> <li>Arçelik to incur increased costs due to increase in physical risks-disruption at the supplier level and company level.</li> <li>Delay in minimum energy efficiency regulations in developing regions where we intend to grow.</li> </ul>
		Increasing costs to design and produce energy efficient appliances despite consumer intention to pay



		extra.	
		<ul> <li>Risks &amp; Opportunities:</li> <li>We could potentially not be able to reflect incression costs to consumers, leading to profitability risk. However, we have extensive R&amp;D experience to produce energy efficient appliances, can innovation cost efficient</li> <li>production systems and increase its energy efficient oppoduct sales.</li> <li>Extreme weather events could increase risk oppandemics and supply chain disruptions, causing further inflation hikes and increase production of However, our value chain exposure to acute/charisks</li> <li>are medium level and resilience plans are put it</li> </ul>	o ate cient f other ng costs. ronic
Transition scenarios IEA SDS	Company- wide	<ul> <li>A qualitative and quantitative approach considereporting year, 2030&amp;2050. Scenario in line with 2.6. Energy related SDGs are assumed to be mourrent net zero pledges are achieved. Arçelik's related risks as well as market, new technology are increased, and climate adaptation risks are minimized.</li> <li>Facts: <ul> <li>We have global 2030 Science Based Targets committed to set a Net Zero 2050 SBT.</li> <li>More than 80% of the GHG emissions of Arçe comes from the use phase of sold products.</li> <li>Production and sales of energy efficient yet affordable appliances are the key to drive rever growth.</li> <li>Parameters: <ul> <li>Global economic losses due to global warming impacted compared to a STEPS scenario, limit 0,5% of global GDP.</li> <li>Inflation hikes expected to continue in the near future, increasing raw material costs.</li> <li>Rise of middle-income consumers in the APA Africa region, and increased access to electricit least developed regions increasing demand for energy efficient appliances.</li> <li>50% of population increase coming from Africa raound 2050, a major market for Arçelik growth Assumptions:</li> <li>Increased carbon price, rapid introduction of E and minimum energy performance standards not than 2025 in developing regions.</li> </ul> </li> </ul></li></ul>	ring RCP et and policy risks and lik ue g less ed to c. r C and y in



			-
			<ul> <li>Increased steel costs are visible due to CBAM's entry into force in 2026. Increased demand for carbon removal credits pushing voluntary removal credit prices more than EUR 80/ton as of 2030.</li> <li>Increased CAPEX need of Arçelik as of 2025 to invest in renewable energy and energy efficient appliances.</li> <li>Risks: <ul> <li>Increasing production costs to produce energy efficient appliances globally on Best Available</li> <li>Technology.</li> <li>Increased reputation risks faced by Arçelik if SBTi targets cannot be met coupled with demand from investors and particularly B2B customers.</li> <li>Increased demand from B2B customers on low carbon products, especially recycled plastics, low carbon steel and energy efficient appliances.</li> <li>Increased risk of rising price of blue carbon credits needed for Net Zero targets.</li> <li>Opportunities:</li> <li>Strong innovative in-house R&amp;D skills to produce most energy efficient products and answer market demand and grow in developing regions.</li> <li>Robust and publicly available decarbonization strategy, more than EUR 500 million green investment to meet SBTi targets. In-house nature based- technology based direct air capture removal know how.</li> </ul> </li> </ul>
Transition scenarios Customized publicly available transition scenario	Company- wide	1.5°C	Arçelik has outsourced S&P to conduct climate- related transition risk analysis in terms of policy risk for its own activities as well as its selected suppliers to understand to potential impact of transition to low- carbon economy based on different scenarios and timelines. A qualitative and quantitative approach considering three time periods (2020 baseline,2030 and 2050) has been applied. S&P Trucost Carbon Pricing Risk Assessment has been applied to measure the impact of rising carbon prices on Arçelik financial performance. The below mentioned components have been considered to calculate the risks related to Arçelik and its value chain: • Carbon Price Database of current carbon taxes,



emissions trading schemes and fuel taxes in over 100
geographies.
Carbon Price Scenarios, High (below 2°C aligned),
Medium (below 2°C aligned delayed action), Low
(based on current policy commitments,2-3°C aligned)
carbon price scenarios.
<ul> <li>Projections of Arçelik revenue, OPEX and GHG</li> </ul>
emissions for future years based on assumptions
concerning future growth.
<ul> <li>Modelling the pass-through of rising carbon prices to</li> </ul>
a company from its suppliers
Risks:
Rise in green electricity prices and availability of
green electricity in countries where Arçelik operates
• EU CBAM, EU Green Deal implications on Arçelik
operations regarding cost increases in Arçelik's key
production inputs such as steel potential impact on
the company's exports from the non-EU countries to
the EU
Cost up per product to innovate more energy
efficient appliances to meet 2030 Science Based
Targets
Possible introduction of an ETS mechanism in
countries in which Arçelik operates
Costs associated with reducing logistics emissions     in the value chain and costs approximated with helping
in the value chain and costs associated with helping suppliers transform to a low carbon economy
Rise in voluntary carbon removal credit prices
Opportunities:
Arçelik has global 2030 Science Based Targets and
committed to set a SBTi Net Zero 2050. Arçelik's net-
zero roadmap is publicly available on its website.
At the supplier level, Arçelik has collected a signed
commitment letter from 173 of its core +450 suppliers
to have set GHG reduction targets

# C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

# **Focal questions**

As Arçelik, we focused on deciding and prioritizing climate-related physical risks at the asset level, as well as our suppliers, taking into consideration climate hazard indicators



such as water stress, flood, heatwaves, cold waves, hurricane, sea level rise, etc., and their impact on Arçelik's operations. In addition to physical risks, the potential impacts of the transition to a low-carbon economy on Arçelik operations were focused to be analyzed in terms of the policy, market, reputation, and technology risks. We aimed to answer the following questions by conducting the scenario analyses:

- What is the most preeminent physical risk for Arcelik and its suppliers?

- How will climate change impact affect Arcelik's market competitiveness in a mid scenario between business as usual and minimal change?

- How would a rapid change in climate regulations affect Arcelik?

# Results of the climate-related scenario analysis with respect to the focal questions

According to the Trucost Physical Risk assessment and Arçelik's internal analysis, Arçelik's overall physical risk score is moderate, the main risk being water stress. India, Romania, and Turkey (Ankara and Çayırova) sites are prone to high water stress risk. Based on the analysis, Arçelik's suppliers' main physical risks are also related to water stress. Long-term action plans have been created according to the results of the water risk analysis.

According to a mid-transition transition scenario, Arcelik would face increased costs due to an increase in physical risks-disruption at the supplier level and company level. On top of this, increased global warming leads to decreased GDP, a slowdown in the economy from increased extreme weather events, increased pandemics disrupting business, inflation hikes, and increased material costs coupled with decreased consumer spending. This brings the conclusion that we could potentially not be able to reflect increasing costs to consumers, leading to profitability risk. However, we have extensive R&D experience to produce energy-efficient appliances, can innovate cost-efficient production systems, and increase energy-efficient product sales. According to the Scenario in line with RCP 2.6, keeping global warming in line with a well below 20C goal, there is likely to be increasing production costs to produce energy efficient appliances globally on Best Available Technology, increases in carbon taxes and cost of steel, increased reputation risks if SBTi targets cannot be met, increased risk of the rising price of blue carbon credits needed for Net Zero targets. This would all have a negative impact on Arcelik's profitability. On the other hand, Arcelik has the

opportunity of strong innovative in-house R&D skills to produce the most energy-efficient products and answer market demand and grow in developing regions and a robust and publicly available decarbonization strategy.

In addition to those risks, rise in voluntary carbon prices, especially the carbon removal credit prices, costs associated with reducing logistics emissions in the value chain, and costs associated with helping suppliers transform to a low carbon economy and reduce raw material emissions for Arçelik production are defined as the medium-long term risks of the company.

# C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.



	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	GHG emissions from the Scope 3 use phase of products are a major source of Arçelik's overall emissions. The risk of not being able to meet the demand of eco-efficient products presents the risk of deteriorating relationships with key business partners and market loss for Arçelik. On top of this, increasing awareness and sensitivity regarding environmental issues led end-users to seek more eco- efficient products. In order to meet the demand, Arçelik makes additional investments in its business processes which brings cost-up for the end products. However, the cost-ups might not be reflected in all markets, and this might have a negative impact on Arçelik's revenues. On the other hand, the sale of eco-efficient products also creates a market opportunity for Arçelik since there is room to grow in emerging markets for both sales and increasing the green revenue through energy-efficient appliances. On top of this, the global efforts for transitioning to net zero creates new business opportunities in terms of energy tracking connected IoT devices and heat pump technologies to heat homes. Despite possible cost-up per product, eco-efficient products are expected to create a net positive impact on revenue since it will provide a brand leverage for Arçelik has approved Science Based Targets (SBTs) for a well-below 2-degree scenario to reduce Scope 3 GHG emissions from the use phase of sold products by 15% by 2030 from a 2018 base year. In order to reach this target, Arçelik aims to increase the market penetration of energy-efficient products, phase out of high GWP products for certain product groups and implement new heating technologies with higher performance. In 2022 49.4% of our revenue came from the sales of energy- efficient products and we decreased the average energy consumption of our washing machines by 8.2%, and the energy usage of our tumble dryers, refrigerators, and dishwashers by 4.7%, 0.2%, and 0.4%, respectively compared to the previous year in Türkiye. Our eco-efficient products include FiberCather, Aq



		SaveWater, InterAct, SelfDry, 'A' Energy Class
		Dishwasher,FullFresh+, MultiZone, IronFinish.
Supply chain and/or value chain	Yes	Arçelik has an extended supply chain and works with suppliers from a wide geography. It has purchasing offices in 9 different countries and more than 200 employees, makes purchases from more than 60 countries in total. In 2022, our global purchasing capacity has reached to nearly 2,000 (direct) material suppliers, and our total purchasing volume, including indirect and investment purchases, has reached approximately EUR 4.5 billion. Thus, supplier operations are an important part of Arçelik's business and managing a sustainable supply chain presents an important business case for Arçelik. One of the most important business impacts of suppliers for Arçelik is GHG emissions. In order to decrease Scope 3 emissions and reach its net-zero targets, Arçelik's effective management of supplier emissions is crucial. For this purpose, Arçelik has an Environmental Data Collection and Monitoring Process. In addition, Arçelik requires its suppliers to manage their energy-related and environmental impact through ISO 50001 and ISO 14001. Suppliers' environmental and social misconduct or non- compliance might lead to a reputation loss for Arçelik and lead to a termination of contract with suppliers. In order to minimize this risk, Arçelik aims to identify and manage the ESG risks of its existing supplier index. ESG data and related evidence are collected through this index via an online survey and supplier performance is verified by an independent accredited audit firm. Arçelik also collects commitments from its suppliers regarding environmental impact via a commitment letter signed by Arçelik CEO, Chief Purchasing and Supply Chain Officer and Chief Marketing Officer. To this date, 173 suppliers signed the commitment letter to set GHG emission/water/waste/ energy efficiency targets. Arçelik intends to disclose these targets publicly as of the end of 2023.
Investment in R&D	Yes	By combining the power of technology with our sustainability approach, we expand innovation in all our activities and throughout our entire value chain. We evaluate risks, opportunities, needs, and expectations of our stakeholders by following rapidly developing global technology trends. Considering changing needs and shifting behaviors, we work on new technologies such as artificial intelligence, data analytics, robotics, the internet of things



		(IoT), and automation, and offer more effective and
		sustainable solutions for our customers and the planet.
		Through collaborations and open innovation, we build on our
		capacity to bring the best solution to the market in less time.
		We serve all over the world with more than 2,300 employees
		and a total of 30 R&D centers, 15 of which are located in
		Türkiye and 15 in other geographies. We carry out
		comprehensive R&D activities from gestation to the
		production of innovative products that
		add value to the users' lives with its own patented
		technologies in every field of operation. Arcelik conducts
		studies in the fields of sustainable, environmental
		technologies, energy and water consumption, noise, and
		vibration reduction, sensor technologies, IoT, smart home
		technologies, polymers, metal and surface coating
		technologies, hygiene, water, and air filtration, air quality, and
		motor driving technologies.
Operations	Yes	At Arcelik, we are working on finding solutions to reduce our
oporationo		use of energy,
		such as through our various energy efficiency projects and
		increased use
		of renewable energy. As a member of the EP100, a global
		initiative led by the
		international non-profit Climate Group, we have committed to
		increasing the
		number of ISO 50001-certified factories to 100% and double
		economic output for every unit of energy consumed globally
		by 2030, compared to 2010. As of 2022, 71% of our factories
		(HQ included) have ISO 50001 Energy
		Management Certificates. In addition, we have reached
		87.53%* towards our
		aim of doubling economic output for every unit of energy
		consumed globally
		by 2030, compared to 2010. We have invested in better
		alternatives and improvements for energy efficiency, and
		have worked on areas such as
		insulation, heat recovery, energy-efficient motor transition,
		and process
		optimization in compressed air, heating, ventilation, air
		conditioning systems,
		and lighting systems. We have carried out a total of 290
		energy-saving projects at production sites sites (Turkey,
		Romania, Russia, South Africa, Pakistan, Thailand, and
		Bangladesh), resulting in a total annual energy conservation
		of around 119,244 GJ. As a result of our enhanced efficiency,



we have been able to avoid emitting 9,087 tonnes of CO2 e
and save EUR 3,079,008 annually.

# C3.4

# (C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures	Revenues: Arçelik continuously produces appliances with higher energy efficiency classes and aims to increase the percentage of energy-efficient products' turnover in its total revenue. In 2022, 49.4% of Arçelik's revenue was generated through the sale of energy-efficient products. The challenging EU Energy Labelling Requirements require products put on the EU market to be ever more energy efficient in order to keep up with the GHG emission reduction demands of the EU. We closely follow such legislation and although these requirements are not mandatory in Turkey, we are working with the Turkish Ministry of Energy and Natural Resources to voluntarily produce products in Turkey according to new EU Energy Labelling Requirements. Electricity use will soar as global middle class demands more major domestic appliances such as refrigerators, washing machines,air-conditioners. The challenge comes from keeping up with the rising consumption demand from consumers and balancing it with innovative, sustainable and affordable products in line with SDG 12, Responsible Production and Consumption as well as SDG 7, Affordable and Clean Energy. By shifting to energy-efficient and climate-friendly air conditioners and refrigerators, developing and emerging economies can reduce their annual carbon dioxide emissions by 570 million tons by 2030. With the sale of high energy-efficient Refrigerators Carbon Finance Project carried out in Turkey, 305,407 ton CO2e reductions have been obtained. Following our acquisition of Defy in South Africa in 2011, we have made enormous investments in innovation and product energy efficiency in product arege energy efficiency, water management and waste management which also enables reduction in costs. We have carried out a total of 290 energy-efficiency we try to increase efficiency in product rangu out a total of 290 energy-efficiency, we have been able to avoid emitting 9,087



tonnes of CO2 e and save EUR 3,079,008 annually. In comparison to 2015 baseline, energy consumption per product decreased by 26.5%. In line with our mission to create sustainable and innovative products, thanks to our in house R&D formulations, we are also developing innovative solutions from using recycled plastics in production. One example can be the LeoPet Project where we used approximately 58.2 million recycled waste PET bottles inwashing machines and washerdryer tubs. We also achieved cost savings in production. Aside from cost savings, we also need to be cautious of the additional cost burden resulting from either legislative policies, or investment demand coupled with pressure from international indices. For instance, due to our science-based targets, we will face additional costs in production while trying to reduce our Scope 3 emissions resulting from the energy consumption of our products during the use phase. This might even affect our profitability and revenue. In the same manner, the EU Energy Labelling requirements and other legislative requirements such as potential carbon taxes, increase in the price of green electricity or increasing price of using new technologies instead of natural gas in production might result in increased costs. To mitigate such risks, we factor the probability and impact of such risks into cost calculations while working on our 5-year strategic plans and planning the production scenarios.

Indirect Costs: To comply with new regulations which have financial impacts, they are assessed in our financial assessment. E.g. approved GHG emission reports to be prepared and sent to T.R. Ministry of Environment and Urbanization yearly under "The Regulation on Monitoring of GHG Emissions". GHG reports of 2 of Arcelik's production plants which are in the scope of this regulation have been audited and verified by the licenced auditor company. In 2010, before Turkish GHG regulation published, Arcelik established GHG Emissions Management and Reporting System. Since 2010, Arcelik's GHG emissions have been audited and verified by an independent body in "100% verification" and "reasonable assurance" level. Total estimated financial implication for both ISO 14064& Ministry verification process and training are around 580,000 TL for the verification period for 2022 GHG emissions. Additionally, environmental and energy studies and projects, and their CAPEX and OPEX values are the main components of our strategic planning process. We develop environmental and energy medium-term strategic plan of each factory and update and monitor them every year. The budgets of environmental and energy projects are defined in accordance with this strategic plan.

Capital Expenditures: For financial planning purposes, each year, energy efficiency and environmental management budget needs of each production factory are factored into CAPEX/OPEX calculations and the amount spent is monitored. The sum of Capital Investment and Operating Expenses related to environmental investments for the year



ſ	2022 is EUR 74.70 million. In Romania, built a	a greenfield factory, Arctic
	Washing Machine factory which will be equipped	bed with the latest available
	technology in accordance with Industry 4.0 ne	eds. 1.6MWp solar energy
	investment as well as investments for rainwat	er collection, water
	recycling etc were factored into the CAPEX ca	alculations. Arçelik had
	been using the Implicit Carbon Price Model si	nce 2010. However, in
	2020 it was switched to Shadow Price interna	l carbon pricing
	mechanism to drive various expenditure decis	ions that will result in a
	reduction of Arçelik's direct and indirect GHG	emissions from its global
	business operations. A price of EUR 50 per to	on of CO2e carbon is
	applied for investments higher than EUR 50,0	00 capital cost and 50 kW
	capacity (As of 2021, the shadow price is incr	eased to 50 EUR from 30
	EUR). In the same manner, we are also worki	ng on building an internal
	water price mechanism to affect the CAPEX a	pproval decision for water
	efficiency investments.	
	Our commitment to producing sustainable and	d innovative products
	results in investments in R&D expenditures. Ir	n 2022, EUR 36.07 R&D
	expenditures were allocated for environmenta	Ily friendly products in
	Turkey, Romania, Russaia, S.Africa, Pakistan	, Bangladesh, and
	Thailand operations.	
	·	

# C3.5

# (C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row	Yes, we identify alignment with both our	At both the company and activity level
1	climate transition plan and a sustainable	
	finance taxonomy	

# C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric Revenue/Turnover

Type of alignment being reported for this financial metric Alignment with our climate transition plan

# Taxonomy under which information is being reported



# Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

66,144,615,973

- Percentage share of selected financial metric aligned in the reporting year (%) 49.4
- Percentage share of selected financial metric planned to align in 2025 (%) 51.4
- Percentage share of selected financial metric planned to align in 2030 (%) 51.4
- **Describe the methodology used to identify spending/revenue that is aligned** Aligned with Arcelik Net Zero Roadmap, the turnover in 2022 has been calculated by calculating the "green turnover" amount in the total turnover of Arçelik. Green turnover includes energy-efficient product turnover which refers to the reduced environmental impact that results from the use phase of products. The same methodology has been used for forecasting the turnover for 1.5 C world in financial years 2025 and 2030.

# **Financial Metric**

CAPEX

- Type of alignment being reported for this financial metric Alignment with our climate transition plan
- Taxonomy under which information is being reported
- Objective under which alignment is being reported
- Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

686,597,229

- Percentage share of selected financial metric aligned in the reporting year (%) 11.6
- Percentage share of selected financial metric planned to align in 2025 (%) 15.6
- Percentage share of selected financial metric planned to align in 2030 (%) 10.1
- Describe the methodology used to identify spending/revenue that is aligned



Aligned with Arcelik Net Zero Roadmap, the CAPEX in 2022 has been calculated by calculating the "green CAPEX" amount in the total CAPEX of Arcelik. Green CAPEX amount includes investments in projects to reduce Scope 1&2&3 emissions, increase the recycled content in the products and packaging (which is related to circular economy and reduction of GHG emissions from purchased goods and services), water management (which is related to water stress), and green chemistry. The same methodology has been used for forecasting the CAPEX for 1.5 C world in financial years 2025 and 2030.

# **Financial Metric**

OPEX

- Type of alignment being reported for this financial metric Alignment with our climate transition plan
- Taxonomy under which information is being reported
- Objective under which alignment is being reported
- Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

621,616,997

Percentage share of selected financial metric aligned in the reporting year (%) 2

Percentage share of selected financial metric planned to align in 2025 (%) 1.7

- Percentage share of selected financial metric planned to align in 2030 (%) 1.7
- **Describe the methodology used to identify spending/revenue that is aligned** Aligned with Arcelik Net Zero Roadmap, the OPEX in 2022 has been calculated by calculating the "green OPEX" amount in the total OPEX of Arçelik. Green OPEX amount includes expenditures in projects to reduce Scope 1&2&3 emissions, increase the recycled content in the products and packaging (which is related to circular economy and reduction of GHG emissions from purchased goods and services), and water management (which is related to water stress). The same methodology has been used for forecasting the OPEX for 1.5 C world in financial years 2025 and 2030.



# C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

# **Economic activity**

Manufacture of energy efficiency equipment for buildings

Taxonomy under which information is being reported EU Taxonomy for Sustainable Activities

Taxonomy Alignment Taxonomy-aligned

Financial metric(s) Turnover CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

13,391,550,800

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

10

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year 10

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

177,233,610



Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year 3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year 0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

618,896,600

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

# Type(s) of substantial contribution

Activity enabling mitigation Activity enabling adaptation

Calculation methodology and supporting information



According to reporting obligations and timeline, Arcelik is currently not within the scope of the Taxonomy regulation. However, Arcelik has voluntarily reported the taxonomy mapped its eligibility and alignment to the EU Taxonomy. The reporting published Arcelik Sustainability Report 2022 was prepared based on the EU Taxonomy (EU 2020/852) and Delegated Act (EU 2021/2139). The primary economic activities based on NACE of Arcelik, a manufacturer of energy efficiency equipment for buildings. The reporting requirements cover the two climate-related target climate mitigation and climate adaptation. There are no reporting requirements for the other environmental targets water, pollution, circular economy, biodiversity and ecosystems. The Taxonomy objective is the climate change mitigation for Arcelik' products. Arcelik's eligible economic activities are household appliances including dryer, dishwasher, freezer& refrigerator, oven, hood, televisions, washer dryer, washing machine, space heating and domestic hot water systems, cooling and ventilation systems rated the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369, heat pumps compliant with the technical screening criteria set out in Section 4.16 of Taxonomy Annex. The mentioned product groups above sold to the member states of the European Union, Great Britain, Norway, Switzerland, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Macedonia, Serbia and Türkiye markets are assessed as taxonomy eligible. The energy labelling standards in these countries complies with Regulation (EU) 2017/1369. Only products sold by Arcelik's own brands are included.. Taxonomy-aligned refers to mentioned above product groups have highest two populated energy classes in the EU market. Taxonomy eligible, but not aligned refers to mentioned above product groups have not highest two populated energy classes in the EU market. The products and markets mentioned above such as sales of small domestic appliances are classified as taxonomy-non-eligible activities. Turnover is the proportion of net turnover that is derived from Taxonomy-aligned products, which equals total net sales. Where turnover is aligned, the CapEx is related to Arcelik investments in assets used to manufacture Taxonomy-aligned products. Where turnover is aligned, the OpEx is related to Arcelik expenses associated with the ex-factory cost of Taxonomy-aligned products.

#### Technical screening criteria met

Yes

#### Details of technical screening criteria analysis

The main technical screening criteria to climate change mitigation are based on the EU Energy Labelling Regulations for Arcelik' products. This product groups are household appliances including dryer, dishwasher, freezer& refrigerator, oven, hood, televisions, washer dryer, washing machine, space heating and domestic hot water systems, cooling and ventilation systems rated the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369, heat pumps compliant with the technical screening criteria set out in Section 4.16 of Taxonomy Annex. The proportion of turnover, capex, and opex from products that are the most efficient energy classes on the market is presented in taxonomy-aligned tables. The mentioned product groups above sold to the member states of the European Union, Great Britain, Norway, Switzerland, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Macedonia, Serbia and Türkiye markets are assessed as taxonomy eligible. The energy labelling



standards in these countries complies with Regulation (EU) 2017/1369. Taxonomyaligned refers to mentioned above product groups have highest two populated energy classes in the EU market.

Taxonomy eligible, but not aligned refers to mentioned above product groups have not highest two populated energy classes in the EU market.

#### Do no significant harm requirements met

Yes

### Details of do no significant harm analysis

Do no significant harm Arcelik's climate mitigation economic activities meet with do no significant harm to the other environmental objectives. Climate adaptation : Being a TCFD signatory, it is essential for the Company to integrate the risks arising from the climate crisis and other ESG-related risks into the Enterprise Risk Management System to execute the relevant action plans in line with the Company's Net Zero 2050 strategy and corporate sustainability strategy. We identify, evaluate, measure and prioritize gualitative-guantitative of climate related and other ESG risks based on scenario analysis in terms of both physical and transition risks. Water and marine resources : We work to identify water risks, not only in the regions where we manufacture but also in all regions where the suppliers are located, to increase water recycling and reuse, and to reduce water withdrawal. WRI Aqueduct Water Risk Atlas is used to assess water risks at our worldwide locations, and analysis results are evaluated annually. Circular economy: Arcelik innovates products and services to reach a closed circular economy by increasing products' recyclability rates, the usage of recycled content in products and their packaging, reusing products and parts, eliminating potentially harmful substances, and by properly managing the end-of life processes including take-back and recycling. Pollution: Arçelik complies with the EU directives, regulations and other requirements in the scope of Arcelik's activities, products & services. We apply certain procedures to our products in accordance with the "Arcelik Chemical Conformity Specification". Arcelik runs business processes in conformity with legal requirements and international management standards, particularly including ISO 14001, ISO 50001&ISO 14064 integrated with ISO 9001. Biodiversity and ecosystems: At Arcelik, we have assessed our biodiversity risk assessment within the scope of our own operations to address our nature-related impacts and dependencies. Based on the outputs of the assessment, we apply Mitigation Hierarchy through preventing, minimizing, and mitigating factors that threaten biodiversity periodically. The pressure on biodiversity stemming from climate change, resource usage, pollution is aimed to be reduced by Arcelik's long term targets based on water, energy, GHG emissions targets.

#### Minimum safeguards compliance requirements met

Yes

#### Details of minimum safeguards compliance analysis

Arçelik's Global Code of Conduct and Related Policies commits to comply with the OECD Guidelines for Multinational Enterprises, the ILO Declaration on Fundamental Principles and Rights at Work, UN Global Compact, UN Guiding Principles on Business and Human Rights, Universal Declaration of Human Rights, Women's Empowerment Principles and Worst Forms of Child Labour Convention and Universal Declaration of



Human Rights. Arcelik complies with all of these standards in all economic activites including the taxonomy-aligned ones. The ethics related issues are coordinated by the Global Compliance Department. A Human Rights Department has been formed to coordinate the global internal/external social audits of Arcelik factories as well as Arcelik suppliers, to determine actual and/or potential human rights related risks and to take necessary precautions/ corrective action plans. There are two committees that report the ethics/human rights related issues to the Board of Directors. The Global Ethics Committee is led by the CEO. The Human Rights Committee is led by the Chief Human Rights Officer. Koc Holding Consumer Durables President, who is in the Board of Arcelik, is responsible to report to the Board about activities of the Global Ethics Committee and Human Rights Committee. The actions taken to determine the ethics/human rights violations in own operations and in the value chain has enabled Arcelik to take precautions against potential risks. The public declaration of the audit findings has distinguished Arcelik among competitors as being one of the best examples in its industry. Arcelik's operations on Human Rights related issues have been showcased by WBCSD as one of the best examples.

### **Economic activity**

Manufacture of energy efficiency equipment for buildings

# Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

#### **Taxonomy Alignment**

Taxonomy-eligible but not aligned

# Financial metric(s)

Turnover CAPEX OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year



Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4) 42,852,962,560

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

32

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

886,168,050

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

15

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year



Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4) 2,166,138,100

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

7

# Type(s) of substantial contribution

### Calculation methodology and supporting information

According to reporting obligations and timeline, Arcelik is currently not within the scope of the Taxonomy regulation. However, Arcelik has voluntarily reported the taxonomy mapped its eligibility and alignment to the EU Taxonomy. The reporting published Arcelik Sustainability Report 2022 was prepared based on the EU Taxonomy (EU 2020/852) and Delegated Act (EU 2021/2139). The primary economic activities based on NACE of Arcelik, a manufacturer of energy efficiency equipment for buildings. The reporting requirements cover the two climate-related target climate mitigation and climate adaptation. There are no reporting requirements for the other environmental targets water, pollution, circular economy, biodiversity and ecosystems. The Taxonomy objective is the climate change mitigation for Arcelik' products. Arcelik's eligible economic activities are household appliances including dryer, dishwasher, freezer& refrigerator, oven, hood, televisions, washer dryer, washing machine, space heating and domestic hot water systems, cooling and ventilation systems rated the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369, heat pumps compliant with the technical screening criteria set out in Section 4.16 of Taxonomy Annex. The mentioned product groups above sold to the member states of the European Union, Great Britain, Norway, Switzerland, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Macedonia, Serbia and Türkiye markets are assessed as taxonomy eligible. The energy labelling standards in these countries complies with Regulation (EU) 2017/1369. Only products sold by Arcelik's own brands are included.. Taxonomy-aligned refers to mentioned above product groups have highest two populated energy classes in the EU market. Taxonomy eligible, but not aligned refers to mentioned above product groups have not highest two populated energy classes in the EU market. The products and markets mentioned above such as sales of small domestic appliances are classified as taxonomy-non-eligible activities. Turnover is the proportion of net turnover that is derived from Taxonomy-aligned products, which equals total net sales. Where turnover is aligned, the CapEx is related to Arcelik investments in assets used to manufacture Taxonomy-aligned products. Where turnover is aligned, the OpEx is related to Arcelik expenses associated with the ex-factory cost of Taxonomy-aligned products.

#### Technical screening criteria met

Yes

Details of technical screening criteria analysis



The main technical screening criteria to climate change mitigation are based on the EU Energy Labelling Regulations for Arcelik' products. This product groups are household appliances including dryer, dishwasher, freezer& refrigerator, oven, hood, televisions, washer dryer, washing machine, space heating and domestic hot water systems, cooling and ventilation systems rated the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369, heat pumps compliant with the technical screening criteria set out in Section 4.16 of Taxonomy Annex. The proportion of turnover, capex, and opex from products that are the most efficient energy classes on the market is presented in taxonomy-aligned tables. The mentioned product groups above sold to the member states of the European Union, Great Britain, Norway, Switzerland, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Macedonia, Serbia and Türkiye markets are assessed as taxonomy eligible. The energy labelling standards in these countries complies with Regulation (EU) 2017/1369. Taxonomy-aligned refers to mentioned above product groups have highest two populated energy classes in the EU market.

Taxonomy eligible, but not aligned refers to mentioned above product groups have not highest two populated energy classes in the EU market.

### Do no significant harm requirements met

Yes

### Details of do no significant harm analysis

Do no significant harm Arcelik's climate mitigation economic activities meet with do no significant harm to the other environmental objectives. Climate adaptation : Being a TCFD signatory, it is essential for the Company to integrate the risks arising from the climate crisis and other ESG-related risks into the Enterprise Risk Management System to execute the relevant action plans in line with the Company's Net Zero 2050 strategy and corporate sustainability strategy. We identify, evaluate, measure and prioritize qualitative-quantitative of climate related and other ESG risks based on scenario analysis in terms of both physical and transition risks. Water and marine resources : We work to identify water risks, not only in the regions where we manufacture but also in all regions where the suppliers are located, to increase water recycling and reuse, and to reduce water withdrawal. WRI Aqueduct Water Risk Atlas is used to assess water risks at our worldwide locations, and analysis results are evaluated annually. Circular economy: Arçelik innovates products and services to reach a closed circular economy by increasing products' recyclability rates, the usage of recycled content in products and their packaging, reusing products and parts, eliminating potentially harmful substances, and by properly managing the end-of life processes including take-back and recycling. Pollution: Arcelik complies with the EU directives, regulations and other requirements in the scope of Arcelik's activities, products & services. We apply certain procedures to our products in accordance with the "Arcelik Chemical Conformity Specification". Arcelik runs business processes in conformity with legal requirements and international management standards, particularly including ISO 14001, ISO 50001&ISO 14064 integrated with ISO 9001. Biodiversity and ecosystems: At Arcelik, we have assessed our biodiversity risk assessment within the scope of our own operations to address our nature-related impacts and dependencies. Based on the outputs of the assessment, we



apply Mitigation Hierarchy through preventing, minimizing, and mitigating factors that threaten biodiversity periodically. The pressure on biodiversity stemming from climate change, resource usage, pollution is aimed to be reduced by Arçelik's long term targets based on water, energy, GHG emissions targets

## Minimum safeguards compliance requirements met

Yes

## Details of minimum safeguards compliance analysis

Arcelik's Global Code of Conduct and Related Policies commits to comply with the OECD Guidelines for Multinational Enterprises, the ILO Declaration on Fundamental Principles and Rights at Work, UN Global Compact, UN Guiding Principles on Business and Human Rights, Universal Declaration of Human Rights, Women's Empowerment Principles and Worst Forms of Child Labour Convention and Universal Declaration of Human Rights. Arcelik complies with all of these standards in all economic activites including the taxonomy-aligned ones. The ethics related issues are coordinated by the Global Compliance Department. A Human Rights Department has been formed to coordinate the global internal/external social audits of Arcelik factories as well as Arcelik suppliers, to determine actual and/or potential human rights related risks and to take necessary precautions/ corrective action plans. There are two committees that report the ethics/human rights related issues to the Board of Directors. The Global Ethics Committee is led by the CEO. The Human Rights Committee is led by the Chief Human Rights Officer. Koc Holding Consumer Durables President, who is in the Board of Arçelik, is responsible to report to the Board about activities of the Global Ethics Committee and Human Rights Committee. The actions taken to determine the ethics/human rights violations in own operations and in the value chain has enabled Arcelik to take precautions against potential risks. The public declaration of the audit findings has distinguished Arcelik among competitors as being one of the best examples in its industry. Arcelik's operations on Human Rights related issues have been showcased by WBCSD as one of the best examples.

## C3.5c

# (C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

Arcelik is a Turkish multinational household appliances manufacturer. Türkiye has not own Taxonomy Regulation. According to reporting obligations and the timeline of EU Taxonomy, Arçelik, not EU based company, is currently not within the scope of the Taxonomy regulation. However, Arçelik has voluntarily reported the taxonomy mapped its eligibility and alignment to the EU Taxonomy. The reporting published Arcelik Sustainability Report 2022 was prepared based on the EU Taxonomy (EU 2020/852) and Delegated Act (EU 2021/2139). This reporting have not verified by third-party.



## **C4. Targets and performance**

## C4.1

(C4.1) Did you have an emissions target that was active in the reporting year? Absolute target Intensity target

## C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number Abs 1 Is this a science-based target? Yes, and this target has been approved by the Science Based Targets initiative **Target ambition** Well-below 2°C aligned Year target was set 2020 **Target coverage** Company-wide Scope(s) Scope 1 Scope 2 Scope 2 accounting method Location-based Scope 3 category(ies) **Base year** 2018 Base year Scope 1 emissions covered by target (metric tons CO2e) 85,584 Base year Scope 2 emissions covered by target (metric tons CO2e) 77.202



Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

162,786

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)



Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year 2030

**Targeted reduction from base year (%)** 

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

113,950.2

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 69,797

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 47,285

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

117,082

## Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] 93.5870816082

## Target status in reporting year

Underway

## Please explain target coverage and identify any exclusions

Our 2030 GHG emissions reduction targets were approved in November 2020 by the Science-Based Targets Initiative (SBTi), for working toward a "well-below 2°C" scenario in line with the Paris Agreement. We commit to reducing our absolute Scope 1 and Scope 2 GHG emissions by 30% by 2030 from the 2018 base year, and our target is approved by SBTi. This target covers 100% of company-wide Scope 1-2 emissions. Base year and reporting year emissions shared above are company-wide total Scope 1&2 emissions.

This target covers Scope 1 and Scope 2 emissions of HQ, production plants in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh. Joint ventures are not included in the scope of the target.

### Plan for achieving target, and progress made to the end of the reporting year

Arçelik reduced its consolidated Scope 1&2 emissions by 28% as of 2022 when compared 2018 base year for its science-based target. So, 93.6% of the target has been achieved. We have carried out a total of 290 energy-saving projects at production sites



sites (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh), resulting in a total annual energy conservation of around 119,244 GJ. As a result of our enhanced efficiency, we have been able to avoid emitting 9,087 tonnes of CO2 e and save EUR 3,079,008 annually.

Arçelik aims to achieve its SBTs for Scope 1&2 by increasing green electricity procurement to 100% globally as of 2030 with Energy Attribute Certificates and long-term Power Purchasing Agreement (PPA); investing further in energy efficiency projects in production; transitioning to 100% electric vehicles and forklifts; transition to low GWP refrigerant usage in production; and use of green hydrogens where possible. Please see our low carbon transition plan for 2030 and 2050 shared publicly on our website: https://www.arcelikglobal.com/en/sustainability/in-touch-with-our-planet/combating-the-climate-crisis/

# List the emissions reduction initiatives which contributed most to achieving this target

## Target reference number

Abs 2

## Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition 2°C aligned

Year target was set 2020

Target coverage Company-wide

Scope(s) Scope 3

#### Scope 2 accounting method

Scope 3 category(ies) Category 11: Use of sold products

Base year

2018

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) 22,921,834

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e) 22,921,834

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

22,921,834

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)



Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) 80.5

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

80.5

Target year 2030

**Targeted reduction from base year (%)** 

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

19,483,558.9

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) 18,660,476.38

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

18,660,476.38

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

18,660,476.38

### Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] 123.9388209512

#### Target status in reporting year

Achieved

#### Please explain target coverage and identify any exclusions

Our 2030 GHG emissions reduction targets were approved in November 2020 by the Science-Based Targets Initiative (SBTi), for working toward a "2°C aligned" scenario in line with the Paris Agreement. We commit to reducing our absolute Scope 3 GHG emissions from the use of sold products by 15% by 2030 from the 2018 base year. This target covers company-wide Scope 3 emissions from the use of the sold products. The products included in the target are washing machine, dishwasher, tumble dryer, freezer, refrigerator, oven, and TV. Base year and reporting year emissions shared above are company-wide total Scope 3 emissions from use of sold products. Since Scope 3 emissions from the use of sold products are 80.5% of total Scope 3 emissions, the target has been set for the GHG emissions from the use of sold products. Other Scope 3 emissions such as from purchased goods and services, upstream and downstream transportation, etc. have been excluded.

Plan for achieving target, and progress made to the end of the reporting year



# List the emissions reduction initiatives which contributed most to achieving this target

Since the target is to reduce use-phase emissions, energy efficiency projects in products have the highest contribution to this target achievement. Some examples are given below:

- Refrigerators: The most energy-efficient refrigerators are available in 60 cm Combi EVO models with B energy class. 60 cm No Frost Combi Refrigerators consume 59% less energy compared to refrigerators with F energy class.

- Washing machines: AquaTech<sup>™</sup> technology uses increased water power due to a newly designed special paddle that ensures a superior detergent mix is distributed for an optimum and delicate clean. AquaTech provides washes that are up to 50% faster, with programs that are up to 50% more gentle with Beyond A energy levels and perfect cleaning results. Additionally, up to 30% less energy consumption than A energy limit is achieved due to the AquaTech technology.

- Dishwashers with EcoFocus Technology: This technology heats water and sprays it directly on the dishes, ensuring that only the surface of the dish is heated. EcoFocus changes D energy level into C energy level by lowering the energy consumption of all programs including Eco.

- Tumble Dryers with EcoGentle Heat Pump Technology: Arçelik's heat pump technology enables lower air temperatures inside the dryer, which help reduce energy consumption. The tumble dryer consumes up to 72% less energy\* than standard condenser dryers with an energy-efficient heat exchange system.

- Ovens: The energy classes of all our built-in ovens are A energy class and above. The most energy-efficient ovens have A++ energy consumption.

## C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

## Target reference number

Int 1

## Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

## **Target ambition**

1.5°C aligned

## Year target was set 2023

Target coverage

Company-wide

## Scope(s)



Scope 1 Scope 2 Scope 3

## Scope 2 accounting method

Location-based

## Scope 3 category(ies)

Category 1: Purchased goods and services Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 9: Downstream transportation and distribution Category 11: Use of sold products Category 12: End-of-life treatment of sold products Other (upstream) Other (downstream)

## Intensity metric

Metric tons CO2e per unit revenue

## Base year

2022

- Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity) 0.00000072
- Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity) 0.00000049

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

0.00003673

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity) 0.00000074

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity) 0.00000006



Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity) 0.00000003

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity) 0.0000007

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity) 0.00000126

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

0.00023746

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity) 0.00000002



Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

0.0002772

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.0002784

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

100

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energyrelated activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

100

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

100

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure 100

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure 100



% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

100

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure 100

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

100

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

100

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

100



% of total base year emissions in all selected Scopes covered by this intensity figure 100 **Target year** 2050 Targeted reduction from base year (%) 90 Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated] 0.00002784 % change anticipated in absolute Scope 1+2 emissions -90 % change anticipated in absolute Scope 3 emissions -90 Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity) 0.0000072 Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity) 0.00000049 Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

0.00003673

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energyrelated activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity) 0.00000074

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity) 0.00000006



Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity) 0.00000003

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity) 0.0000007

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity) 0.00000126

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity) 0.00023746

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity) 0.0000002

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity) 0.0000000002

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity) 0.00000002



# Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

0.0002772

# Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0002784

## Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

## % of target achieved relative to base year [auto-calculated]

0

## Target status in reporting year

New

## Please explain target coverage and identify any exclusions

Aligned with our 2050 net-zero commitment, we also set an intensity target to follow our Scope 1, Scope 2, and Scope 3 emissions (in related categories) according to product revenue. The coverage of this target has been determined as the same as Arçelik's net-zero target which includes All Arçelik production plants (including joint ventures), and major domestic appliances (MDA).

## Plan for achieving target, and progress made to the end of the reporting year

We have carried out a total of 290 energy-saving projects at production sites sites (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh), resulting in a total annual energy conservation of around 119,244 GJ. As a result of our enhanced efficiency, we have been able to avoid emitting 9,087 tonnes of CO2 e and save EUR 3,079,008 annually.

Arcelik aims to achieve its SBTs for Scope 1&2 by increasing green electricity procurement to 100% globally as of 2030 with Energy Attribute Certificates and longterm Power Purchasing Agreement (PPA); investing further in energy efficiency projects in production; transitioning to 100% electric vehicles and forklifts; transition to low GWP refrigerant usage in production; and use of green hydrogens where possible. To reduce Scope 3 emissions in the use of sold product category, the average energy consumption of is decreased by 20% for washing machines, 4% for tumble dryers, 3.5% for refrigerators, and 1% for dishwashers compared to the previous year. We will continue to increase penetration of super energy efficient products globally, including developing and emerging countries without energy regulation, penetration of solar-powered refrigerating appliances especially in South Africa, Pakistan, India, and Bangladesh, and increase R&D for efficient and affordable products. As an example to reduce our logistic emissions, we plan to switch to biofuel alternatives for downstream transportation. We increased recycled plastic content in our products up to 8% at the end of 2022. We will increase % of recycled raw materials purchased from suppliers - increasing recycled plastic content to 40% in total products.

Please see our low carbon transition plan for 2030 and 2050 shared publicly on our



website: https://www.arcelikglobal.com/en/sustainability/in-touch-with-our-planet/combating-the-climate-crisis/

List the emissions reduction initiatives which contributed most to achieving this target

## C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production Target(s) to reduce methane emissions Net-zero target(s) Other climate-related target(s)

## C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

**Target reference number** Low 1 Year target was set 2019 **Target coverage** Company-wide Target type: energy carrier Electricity Target type: activity Consumption Target type: energy source Renewable energy source(s) only **Base year** 2019 Consumption or production of selected energy carrier in base year (MWh) 314,537 % share of low-carbon or renewable energy in base year 71.9 **Target year** 



2030

- % share of low-carbon or renewable energy in target year 100
- % share of low-carbon or renewable energy in reporting year 65
- % of target achieved relative to base year [auto-calculated] -24.5551601423
- Target status in reporting year

Underway

Is this target part of an emissions target?

Yes, the result of this target (Low 1) will affect our other emission-reduction targets.

## Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

## Please explain target coverage and identify any exclusions

All Arçelik Global production facilities are included in the scope.

### Plan for achieving target, and progress made to the end of the reporting year

Arcelik aims to supply all the consumed electricity in all manufacturing plants as green electricity (generated from renewable energy sources) by 2030. Although the progress seems to decrease in green electricity supplying. Arcelik expand its boundaries by acquiring new production plants in the reporting year. In 2019, the total global consumed electricity was 314,537 MWh and 71.9% of total consumed electricity was green electricity which equals 226,019 MWh. However, in 2022 the total consumed electricity is 420,022 MWh and 65% of total consumed electricity is green electricity which equals 273,652 MWh. It can be seen clearly that, the absolute green electricity amount is increased. Besides Turkey and Romania operations (we have reached 100% ratio in both Turkey and Romania operations), in 2022 Arcelik Hitachi Thailand plant met approximately 23% of its annual electricity consumption from a long term PPA with floating solar PV plant. In 2022, the scope of this target has been extended due to new acquisitions and the integration of new plants. Besides, we could not purchase EAC for our Russia Plants since green electricity certification issuing body has ceased their operations in Russia. We will continue purchasing green electricity in all countries where Arcelik has production facilities (based on the availability of green electricity in those countries) by 2030. In addition to this, we are installing solar power plants to meet our own electricity consumption.

List the actions which contributed most to achieving this target

Target reference number Low 2



Year target was set 2019

Target coverage Company-wide

Target type: energy carrier Electricity

Target type: activity Production

Target type: energy source Renewable energy source(s) only

## Base year

2019

- Consumption or production of selected energy carrier in base year (MWh) 731
- % share of low-carbon or renewable energy in base year 0.2

Target year

2030

- % share of low-carbon or renewable energy in target year 10.87
- % share of low-carbon or renewable energy in reporting year 0.9
- % of target achieved relative to base year [auto-calculated] 6.5604498594
- Target status in reporting year Underway
- Is this target part of an emissions target?

Yes, the result of this target (Low 1) will affect our other GHG Emission targets.

## Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

Arçelik's all global production facilities are included in the scope.

**Plan for achieving target, and progress made to the end of the reporting year** Our first target was to reach 15 MW in terms of installed renewable energy capacity when we define this target on 2019. According to our new challenging road map, we revise our 2030 target as having 50 MW installed renewable energy capacity. We have



created a Renewable Energy Road Map and initiated the feasibility studies in all our global production plants. In reporting period, total capacity is reached to 10.2 MW.

## List the actions which contributed most to achieving this target

## C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

-	get reference number
	Oth 1
Yea	r target was set
	2019
Targ	get coverage
	Company-wide
Targ	get type: absolute or intensity
	Intensity
-	get type: category & Metric (target numerator if reporting an intensity
targ	-
	Energy consumption or efficiency toe
Targ	get denominator (intensity targets only)
	unit of production
Bas	e year
	2015
Figu	ire or percentage in base year
	0
Targ	get year
	2030
Figu	ire or percentage in target year
	45
-	ire or percentage in reporting year
	26.5
	f target achieved relative to base year [auto-calculated] 58.8888888889
Tarc	get status in reporting year



### Underway

### Is this target part of an emissions target?

Yes, the result of this target (Oth 1) will affect our other targets.

## Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

## Please explain target coverage and identify any exclusions

Arçelik has a target to reduce its energy consumption per product in all global operations by 45% in 2030, in comparison with the base year of 2015. As of 2022, 26.5% reduction has been provided. Arçelik Sustainability Report 2022 pg.38 https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf

## Plan for achieving target, and progress made to the end of the reporting year

We invest in improvement and better alternatives for energy efficiency. We continue our work in areas such as energy efficiency, insulation, heat recovery, energy efficient motor transition and process optimisation in compressed air, heating, ventilation, and air conditioning systems and lighting systems. We implemented a total of 290 energy efficiency projects at our production facilities (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh), annual saving approximately 119,244 GJ of energy. Thanks to this increase in efficiency, we prevented 9,087 tons of CO2 e emissions and achieved a financial savings of EUR 3,079,006 annually. We define our energy efficiency projects with global workshops with brainstorming sessions and roll out the best practices through the global production plants systematically in each year.

## List the actions which contributed most to achieving this target

Target ref Oth 2	erence number
Year targe	et was set
Target co	verage
•	any-wide be: absolute or intensity
Intensi	-
Target typ	pe: category & Metric (target numerator if reporting an intensity
target)	
Energy	<i>i</i> productivity
	frevenue



GJ

Base year 2010

Figure or percentage in base year

Target year 2030

Figure or percentage in target year

100

## Figure or percentage in reporting year

87.53

% of target achieved relative to base year [auto-calculated] 87.53

## Target status in reporting year

Underway

## Is this target part of an emissions target?

Yes, the result of this target (Oth 2) will affect our other emission-related targets.

Is this target part of an overarching initiative? EP100

## Please explain target coverage and identify any exclusions

Arçelik's all global production facilities are included in the scope.

## Plan for achieving target, and progress made to the end of the reporting year

We have become a member of EP100, led by Climate Group. EP100 brings together more than 120 energy-smart companies committed to using energy more productively. Through this membership, we are committed to doubling our economic output for every unit of energy we consume globally by 2030, compared to 2010, by increasing energy efficiency. In line with our SBTi targets, we have long term plan for all global manufacturing plants to reach the target. We implemented a total of 290 energy efficiency projects at our production facilities (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh), annual saving approximately 119,244 GJ of energy. Thanks to this increase in efficiency, we prevented 9,087 tons of CO2 e emissions and achieved a financial savings of EUR 3,079,006 annually.

List the actions which contributed most to achieving this target

Target reference number Oth 3



Year target was set

2021

Target coverage Company-wide

## Target type: absolute or intensity

Absolute

# Target type: category & Metric (target numerator if reporting an intensity target)

Energy productivity Other, please specify Percentage of ISO 50001 EnMS Certified Production Plants

## Target denominator (intensity targets only)

Base year 2019

## Figure or percentage in base year

52

Target year 2025

Figure or percentage in target year

Figure or percentage in reporting year

71

% of target achieved relative to base year [auto-calculated] 39.5833333333

## Target status in reporting year

Underway

## Is this target part of an emissions target?

Yes, the result of this target (Oth 2) will affect our other emission-related targets.

## Is this target part of an overarching initiative? EP100

## Please explain target coverage and identify any exclusions

Arçelik's all global production facilities are included in the scope.

## Plan for achieving target, and progress made to the end of the reporting year As of 2022, 71% of Arçelik factories have ISO 50001 Energy Management Certificate (HQ included). As a member of EP100, Arçelik has committed to increasing the ISO50001 certified factories to 100%. In 2022, DPL-1 and Arçelik-Hitachi Thailand



facilities have been certified. We have a road map to increase our ISO 50001 EnMS coverage and reach 100% by 2025. Sustainability Report 2022 pg. 49 https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf

## List the actions which contributed most to achieving this target

## C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

## **Target coverage**

Company-wide

## Absolute/intensity emission target(s) linked to this net-zero target

Abs1 Abs2 Int1

## Target year for achieving net zero

2050

## Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

## Please explain target coverage and identify any exclusions

Arçelik has also committed to the Science Based Targets Initiative to become a Net Zero Company as of 2050 in line with the Science Based Targets Net Zero Standard. This means that Arçelik will set even more ambitious

near-term and long-term Science Based Targets in line with a 1.5-degree scenario. We will revise the new base year target as 2022 and broaden the scope to include all of Arçelik's joint ventures as well as all MDA (major

domestic appliance) product groups. We will submit our Net Zero Target to the Science Based Targets Initiative as of 2024 March for validation. Our net-zero target means that from the 2022 base year, we are on a pathway

to decrease our global scope 1- 2 and Scope 3 emissions by 90% by 2050. We aim to do this by taking challenging innovative actions in our whole value chain and investing in qualified nature-based and/or technology-based carbon removal projects for our 10% residual emissions in line with the SBTi Net Zero Standard.

Our target coverage, implemented and planned actions to reach the net-zero target can be found in the given link below:

https://www.arcelikglobal.com/en/sustainability/in-touch-with-our-planet/combating-the-climate-crisis/



# Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

# Planned milestones and/or near-term investments for neutralization at target year

In line with SBTi Net Zero Standard, residual emissions (10% of total emissions) will be neutralized by implementing nature-based (such as blue carbon) and/or technology-based carbon removal projects.

Our target coverage, implemented and planned actions to reach the net-zero target can be found in the given link below:

https://www.arcelikglobal.com/en/sustainability/in-touch-with-our-planet/combating-the-climate-crisis/

## Planned actions to mitigate emissions beyond your value chain (optional)

We implemented a total of 290 energy efficiency projects at our production facilities (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh), annual saving approximately 119,244 GJ of energy. Thanks to this increase in efficiency, we prevented 9,087 tons of CO2 e emissions and achieved a financial savings of EUR 3,079,006 annually.

Arcelik aims to achieve its SBTs for Scope 1&2 by increasing green electricity procurement to 100% globally as of 2030 with Energy Attribute Certificates and longterm Power Purchasing Agreement (PPA); investing further in energy efficiency projects in production; transitioning to 100% electric vehicles and forklifts; transition to low GWP refrigerant usage in production; and use of green hydrogens where possible. To reduce Scope 3 emissions in the use of sold product category, the average energy consumption of is decreased by 20% for washing machines, 4% for tumble dryers, 3.5% for refrigerators, and 1% for dishwashers compared to the previous year. We will continue to increase penetration of super energy efficient products globally, including developing and emerging countries without energy regulation, penetration of solar-powered refrigerating appliances especially in South Africa, Pakistan, India, and Bangladesh, and increase R&D for efficient and affordable products. As an example to reduce our logistic emissions, we plan to switch to biofuel alternatives for downstream transportation. We increased recycled plastic content in our products up to 8% at the end of 2022. We will increase % of recycled raw materials purchased from suppliers - increasing recycled plastic content to 40% in total products.

Some examples of our supplier engagement actions to achieve this target are given below:

• Increasing supplier energy efficiency projects, expanding the scope of energy-efficient motor conversion project with suppliers

• Increasing the number of suppliers setting GHG emission reduction targets

· Incentivizing logistics emissions reduction projects at suppliers

Please see our low carbon transition plan for 2030 and 2050 shared publicly on our website: https://www.arcelikglobal.com/en/sustainability/in-touch-with-our-planet/combating-the-climate-crisis/



## C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

## C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	328	40,667
Not to be implemented	0	0

## C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

## Initiative category & Initiative type

Energy efficiency in buildings Heating, Ventilation and Air Conditioning (HVAC)

## Estimated annual CO2e savings (metric tonnes CO2e)

340

## Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1 Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4) 2,210,634

Investment required (unit currency – as specified in C0.4) 384,671



## Payback period

<1 year

## Estimated lifetime of the initiative

6-10 years

## Comment

Implementing high efficient HVAC technologies reduce the GHG emmissions and energy consumption while improving the indoor air quality. As Arçelik, we are following and if applicable, implementing the new technologies in HVAC equipment just like in other improvement activities. (Such as using variable speed A/C fans, improvement of funnel ventilation, using dehumidifiers instead of A/C plants, using new and high efficient technologies, using air curtains to prevent conditioned air leakages etc.)

## Initiative category & Initiative type

Energy efficiency in production processes Process optimization

## Estimated annual CO2e savings (metric tonnes CO2e)

3,653

## Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1 Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4) 21,777,771

## Investment required (unit currency – as specified in C0.4) 19,382,637

## **Payback period**

<1 year

## Estimated lifetime of the initiative

11-15 years

## Comment

Process optimisation projects are usually low-budget activities, thus they have shortterm payback periods such as implementing new sensors, monitoring devices in several areas, reducing the cycle times of the processes, changing or cancelling the unnecessary operations to provide the same work with less energy consumption. As Arçelik, we analyse our processes and implement optimisation projects to decrease our base consumption.



## Initiative category & Initiative type

Energy efficiency in production processes Motors and drives

- Estimated annual CO2e savings (metric tonnes CO2e) 155
- Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 1,247,449

Investment required (unit currency - as specified in C0.4)

1,026,520

**Payback period** 

<1 year

## Estimated lifetime of the initiative

6-10 years

### Comment

As Arçelik, we generally use new energy efficient electric motors in IE3 and IE4 classes. To decrease the mechanical losses and increase the efficiency we have implemented permanent magnet motor technology in some projects. We also apply inverters to electric motors which have varying loads according to their feasibility.

## Initiative category & Initiative type

Energy efficiency in production processes Machine/equipment replacement

## Estimated annual CO2e savings (metric tonnes CO2e)

2,100

## Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1 Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

## Annual monetary savings (unit currency – as specified in C0.4)

11,416,251

## Investment required (unit currency – as specified in C0.4)

18,980,240



# **Payback period**

1-3 years

# Estimated lifetime of the initiative

6-10 years

# Comment

High efficient technologies can help to reduce the energy consumption during their lifetime. Life cycle cost analyse is one of the important decision criteria while procuring an equipment in Arçelik. Since 2020, we have switched to Shadow Carbon Price mechanism from Implicit Carbon Price mechanism. Thus, we are choosing low-carbon technology equipment in our operations.

Initiative category & Initiative type

Energy efficiency in buildings Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

446

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 2,486,970

# Investment required (unit currency - as specified in C0.4)

11,917,039

# **Payback period**

4-10 years

# Estimated lifetime of the initiative

11-15 years

# Comment

Lighting projects include the changing of inefficient lighting fixtures (fluorescent, metalhalide lamps) with LED technology, using the motion and presence sensors to reduce the consumption when there is no occupancy, increasing the daylight utilization in plants etc.

# Initiative category & Initiative type

Energy efficiency in production processes



Waste heat recovery

# Estimated annual CO2e savings (metric tonnes CO2e)

507

# Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 1

# Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4) 3,830,154

# Investment required (unit currency – as specified in C0.4)

2,352,034

# Payback period

<1 year

# Estimated lifetime of the initiative

11-15 vears

# Comment

Heat recovery is the process by which heat would be lost in processes is recovered and used somewhere else, improving the energy efficiency of the processes and facility. With adding some new equipment and making some changes/revisions in pipelines, it is possible to use the waste heat.

# Initiative category & Initiative type

Energy efficiency in production processes Compressed air

# Estimated annual CO2e savings (metric tonnes CO2e)

1,138

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4) 7,175,115

# Investment required (unit currency - as specified in C0.4) 6,465,397

# **Payback period**



#### <1 year

#### Estimated lifetime of the initiative

6-10 years

#### Comment

Compression losses can be reduced by using fittings with low losses, revising and optimising the pipeline and compressor rooms, reducing the number of equipment which use compressed air, reducing the set pressure of air compressors, making regular checks for leak detection and making compressed air production more effective. Most of the initiatives can be implemented with low financial investments or no budget required, and lifetime of application is usually long.

Initiative category & Initiative type Energy efficiency in production processes Smart control system Estimated annual CO2e savings (metric tonnes CO2e) 133 Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (market-based) Voluntary/Mandatory Voluntary Annual monetary savings (unit currency – as specified in C0.4) 914,765 Investment required (unit currency – as specified in C0.4) 21,769 **Payback period** <1 year Estimated lifetime of the initiative 6-10 years

# Comment

Smart control system can help to increase the efficiency of processes by controlling the HVAC and lighting systems with integrated control equipment such as timers, lighting automation with daylight sensors, presence sensors etc.

#### Initiative category & Initiative type

Energy efficiency in production processes Automation



# Estimated annual CO2e savings (metric tonnes CO2e)

370

# Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1 Scope 2 (market-based)

# Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

2,348,747

Investment required (unit currency – as specified in C0.4)

92,440

# **Payback period**

<1 year

# Estimated lifetime of the initiative

6-10 years

# Comment

Automation projects are usually low budget activities. Thus they have short-term payback periods; such as adding new sensors or monitoring devices in several areas, adapting the automation codes and algorithms to the equipment and SCADA. Projects, which are categorised as automation as follows; preventing the redundant energy consumption of machines/equipment during non-production times and inactive hours (such as brake times).

# Initiative category & Initiative type

Energy efficiency in production processes Other, please specify Insulation

# Estimated annual CO2e savings (metric tonnes CO2e)

245

# Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1 Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4)

261,288



# Investment required (unit currency – as specified in C0.4)

2,191,908

# **Payback period**

4-10 years

# Estimated lifetime of the initiative

6-10 years

# Comment

Insulation of exposed pipings, boilers, drying ovens with materials which have low thermal conductivity. As Arçelik, we conduct periodical controls to check the insulations of process pipelines, machines/equipment, auxiliary facilities with thermal imaging systems to find and execute the insulation activities. Insulation of exposed surfaces can help to reduce the heat leakages, that brings out the reduction of energy consumption (both for cooling and heating side). Furthermore, insulation of cooling pipelines prevents the pipings from corrosion as well.

# Initiative category & Initiative type

Waste reduction and material circularity Remanufacturing

# Estimated annual CO2e savings (metric tonnes CO2e) 2,312

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 3 category 12: End-of-life treatment of sold products

# ....

Voluntary/Mandatory

Voluntary

# Annual monetary savings (unit currency – as specified in C0.4) 195,000,000

# Investment required (unit currency - as specified in C0.4)

0

# **Payback period**

No payback

# Estimated lifetime of the initiative

<1 year

# Comment

All production plants in Turkey have their own remanufacturing operations. In 2022, 54,629 products including consumer electronics, televisions, and major and small domestic appliances are refurbished in our remanufacturing places in the production plants, which means that we prevent these products to become waste electrical and electronics equipment (WEEE). The number of sold remanufacturing products is approx.



47,000. By doing so, we have saved approximately 2,312 tons of CO2e. The project does not have specific investments.

Initiative category & Initiative type

Waste reduction and material circularity Product/component/material recycling

Estimated annual CO2e savings (metric tonnes CO2e) 24,387

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 3 category 1: Purchased goods & services

#### Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 30,016,246

Investment required (unit currency – as specified in C0.4)

8,556,768

**Payback period** 

<1 year

#### Estimated lifetime of the initiative

6-10 years

#### Comment

With the innovative products we offer and the improvements we make in our operations, we strive to protect natural resources in the world and to reduce our environmental footprint. To produce solutions for global environmental problems such as the climate crisis, and plastic pollution, we integrate sustainability into the products we develop. Arçelik has a Central R&D department that develops recycled and bio-based material formulations to reduce virgin plastic use. We contribute to the circular economy with our innovative products and materials and aim to increase the use of alternative materials. Arçelik develops projects to recycle materials via the innovative technologies it develops. Some of the examples of these projects are LeoPet where Arçelik uses recycled PET bottles; recycling waste fishing nets and industrial thread in an innovative way and uses them in different parts of its product groups in order to prevent the damage caused by waste fishing nets released into the seas and oceans; using recycled plastics obtained from Arçelik's own WEEE recycling plants; developing bioplastic material formulations from organic wastes.

#### Initiative category & Initiative type

Low-carbon energy generation Solar PV



# Estimated annual CO2e savings (metric tonnes CO2e) 4,881

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 18,891,960

Investment required (unit currency – as specified in C0.4) 68,970,205

# **Payback period**

4-10 years

# Estimated lifetime of the initiative

21-30 years

# Comment

According to our targets, we are increasing our installed capacity in renewables. Only new investments during the reporting year are disclosed as Emission Reduction Initiatives here.

# C4.3c

activities?	
Method	Comment
Compliance with regulatory requirements/standards	Arçelik complies with legal legislation on GHG emission reduction and fully comply with eco-design legal legislation which describes product energy efficiency limits. Thanks to membership in APPLiA (Home Appliance Manufacturers Association in EU) we participate in all operations carried out in EU regarding product energy performances and labelling and developments are closely followed. Arcelik has a close relationship with all relevant ministry departments and work together on the implementation of EU regulations to Turkish regulations system. Energy efficiency operations in production are performed in accordance with all legal requirements described at Turkish Energy Efficiency Act. Greenhouse gas emission mitigation is achieved with energy efficiency operations at the product and production levels.
Dedicated budget for energy efficiency	Annually, energy budgets and energy efficiency investment budgets are allocated, and projects are realized according to allocated budgets. Targets to reduce energy consumption are set at the beginning of each year and compliance with the planned target is

# (C4.3c) What methods do you use to drive investment in emissions reduction activities?



	monitored systematically and periodically. GHG emission reduction is calculated, followed up systematically and periodically as well.
Dedicated budget for low- carbon product R&D	Arçelik's R&D Departments design innovative and environmentally friendly products with less energy and water consumption in use- phase while they provide resource efficiency in the production phase by decreasing raw material consumption and increasing recycled content in the products. Currently, Arçelik holds a number of records about white goods consuming the least energy.
Financial optimization calculations	Arçelik performs operations to optimize the energy consumption. Financial optimizations are made about energy efficiency and road for investment is paved. Short and medium term energy efficiency projects are constantly followed; financial optimization is made and put into practice in a short span of time.
Marginal abatement cost curve	Energy related expense items are followed and reduction targets are set. While increase in production is targeted, goals for decline in energy consumption and energy budgets are set.
Partnering with governments on technology development	In order to increase energy efficiency in products and production, joint works with both governmental agencies and universities are performed. Projects are carried out with TÜBİTAK (The Scientific and Technological Research Council of Turkey), energy-efficient products and production technologies are developed. Projects are carried out also under European Union Framework Programs. In addition, many projects are carried out with both state and foundation universities and operations for increasing efficiency in product and production are carried out. Various cooperation projects are also carried out with Ministries.

# C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

# C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon Other, please specify



Energy label regulations in different countries such as EU countries, Australia, South Africa Russian, China, etc.; Resource efficiency applications as raw material reduction and recycled content increase in the products

# Type of product(s) or service(s)

#### Other

Other, please specify

White goods and electronic products (washing machine, washer-dryer, dishwasher, tumble dryer, refrigerator, freezer, oven, TV, air conditioner, small domestic appliance (SDA))

# Description of product(s) or service(s)

Low carbon products refer to products that use less raw materials, consist of recycled raw materials, and consume less energy and water than the lowest allowable energy and water efficiency classes. In the scope of this definition, there are sub-definitions of our low-carbon products as given below:

- Energy-efficient products: It refers to the reduced environmental impact that results from the use phase of products. The coverage is products that consume less energy than the lowest "allowable" energy efficiency classes based on the available regulations in the specific countries. "Allowable" refers to the lowest energy class allowed in the related market. It was calculated by considering products that have higher energy efficiency levels than the allowable class on the related market.

- Recycled or biocomposite plastic materials used in products: It refers to improving the circularity of materials from the use of recycled materials. The coverage is products that included recycled plastics and/or bio composite materials.

- Products and packaging reduced usage of raw materials: It refers to the reduced environmental impact that results from the production phase of products. The coverage is products which material reduction in comparison with the previous model. The material could be any material used in product and/or packaging such as plastics, metals, or glasses.

# Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

# Methodology used to calculate avoided emissions

Other, please specify

Multiplying energy saving amount from energy-efficient sold products with country specific electricity emission factors & Multiplying weights of recycled materials and reduced raw material with related material emission factors

# Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Other, please specify Cradle-to-gate + Use stage

# Functional unit used

Energy consumption of energy-efficient products in 2022 & Production of resource efficient products in 2022



# Reference product/service or baseline scenario used

We have 3 different base scenarios for our 3 types of low-carbon products:

1. Baseline energy-efficient products are the products that consume the lowest "allowable" energy and water efficiency classes in the market.

2. Baseline for resource-efficient products are the products that are produced without resource efficiency (without raw material reduction).

3. Baseline for products with recycled or bio materials is the same product with only virgin materials.

# Life cycle stage(s) covered for the reference product/service or baseline scenario

Other, please specify Cradle-to-gate + Use stage

# Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

294,439

# Explain your calculation of avoided emissions, including any assumptions

Avoided emissions were calculated by multiplying energy saving amount by energyefficient sold products in reporting year with country-specific electricity emission factors. We multiply electricity saving (kWh) with the electricity emissions factor (kg CO2e/kWh) of related countries. The electricity emission factors are supplied from estimated IEA for all countries. Avoided emissions for third parties (consumers) from these products in 2022 have been calculated as 264,367 tonnes of CO2e. Avoided Emissions from reduced raw materials and recycled content in products was calculated by amount of total recycled plastic and bio composite plastic

consumption and the amount of reduced raw material weights, and multiplied these amounts with material emission factors from the Ecoinvent database or DEFRA dataset published by UK Government. Avoided emissions s from reduced raw materials and recycled content in 2022 have been calculated as 30,072 tonnes of CO2e. It is 294,492 tonnes CO2e in total.

# Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

61.7

# **C5. Emissions methodology**

# C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No



# C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

# Has there been a structural change?

Yes, an acquisition

# Name of organization(s) acquired, divested from, or merged with

- 1. Manisa Refrigerator and Washing Machine Production Plants in Turkey
- 2. Singer SMC Production Plant and Singer SRP Production Plant in Bangladesh

# Details of structural change(s), including completion dates

Singer SMC Production Plant and Singer SRP Production Plant in Bangladesh have been acquired in 2019 with the ownership of 57%. Singer production plants in Bangladesh are now Arçelik's subsidiaries.

Manisa Refrigerator and Washing Machine Production Plants in Turkey have been acquired with the ownership of 100% and the completion date is 2022.

# C5.1b

# (C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in boundary	Since Manisa Refrigerator and Washing Machine Production Plants in Turkey and Singer SMC Production Plant and Singer SRP Production Plant in Bangladesh have been included in Arçelik's GHG inventory in 2022, Arçelik's reporting boundary has been changed in 2022. Due to that reason, Arçelik's base year has been changed and reset to 2022. There are no other changes in methodology or reporting year definition.

# C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

Base year	Base year emissions recalculation policy,	Past years'
recalculation	including significance threshold	recalculation



Row	No, because we have	Arçelik's base year for Scope 1&2 emissions was	No
1	not evaluated whether	2019 and 2020 for Scope 3 previously. Since new	
	the changes should	production plants (as the result of acquisitions) in	
	trigger a base year	Manisa in Turkey and Bangladesh have been added	
	recalculation	to Arçelik's GHG inventory boundary, the base year	
		has been revised and selected as 2022 for all Scope	
		1, Scope 2, and Scope 3 emissions. In addition,	
		Arçelik plans to reset its near-term science-based	
		target to be aligned with the 1.5C scenario in the	
		scope of its commitment to SBTi's Net-Zero Standard	
		and will submit its 2050 net-zero target to SBTi in	
		March 2024. To be aligned also with the base year of	
		the new science-based target and net-zero target,	
		the base year of Arçelik's GHG inventory has been	
		changed to 2022.	

# C5.2

# (C5.2) Provide your base year and base year emissions.

# Scope 1

#### Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

69,797

# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022. Scope 1 GHG emissions in the base year of 2022 in Arçelik's Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh operations have been calculated as 69,797.00 metric tonnes of CO2e according to ISO 14064-1 Standard.

# Scope 2 (location-based)

# Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

47,285



# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022. Scope 2 (location-based) GHG emissions in the base year of 2022 in Arçelik's Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh operations have been calculated as 47,285.00 metric tonnes of CO2e according to ISO 14064-1 Standard.

# Scope 2 (market-based)

# Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

0

# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022. Market-based Scope 2 emissions have been calculated as zero since the electricity is supplied from renewable sources. 100% of the electricity used in HQ and production plants in Turkey and Romania has been supplied from renewable sources. So, Scope 2 (market-based) emissions of these locations have been calculated as zero.

# Scope 3 category 1: Purchased goods and services

# Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

3,571,364

# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022.

The sources of indirect GHG emissions from products used by the organization are raw materials, materials, and packaging materials 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 machines, dishwashers, refrigerators, top table refrigerators, tumble dryers, ovens, hobs, hoods, air conditioners, and water dispensers produced in Arçelik's production plants in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh. GHG emissions



caused by used materials such as plastics, metals, glasses, dyes, chemicals, and other parts of the products are calculated by using the weight, sold product number, and emission factors of used materials. Material data (material types and weights) are collected from product bill-of-material lists, R&D, and other related departments. Emissions factors are mainly taken from the Ecoinvent database, DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018 and verified in accordance with ISO 14064-3:2019 standards and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 2: Capital goods

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

0

#### Comment

The capital goods are not relevant for Arçelik since owned capital goods' emissions are estimated to be at a negligible quantity of our total emissions.

# Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

# Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

0

# Comment

GHG emissions from fuel-and-energy-related activities (not included in Scope 1 or 2) are a negligible quantity of our total emissions.

# Scope 3 category 4: Upstream transportation and distribution

#### Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

72,124



# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022.

GHG emissions from upstream transportation and distribution generated during the transportation of materials and components used in products have been calculated as 72,124.00 tonnes CO2e. The emission factors are taken from EPA Center for Corporate Climate Leadership GHG Emission Factors Hub Emission Factors for Greenhouse Gas Inventories Table 9: Product Transport Emission Factors. All calculations are completed in accordance with ISO 14064-1:2010 and verified in accordance with ISO 14064-3 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 5: Waste generated in operations

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

5,501

# Comment

Since new production plants (as the result of acquisitions) in Manisa in Turkey and in Bangladesh have been added to Arçelik's GHG inventory boundary, the base year has been revised and selected as 2022. Greenhouse gas emissions emitted during recycling or disposal of wastes generated in the production have been calculated by multiplying waste amounts and emissions factors of waste recycling or disposal processes by type. Waste amount data is collected from production areas. Emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2021 published by UK Government and Ecoinvent database. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 6: Business travel

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

# Base year emissions (metric tons CO2e) 3.020

3,020

# Comment



Indirect GHG emissions from business travel include GHG emissions from international and domestic travel by road, railway, and airways. 100% of business travels in Arçelik Turkey, Romania, Russia, South Africa, Pakistan, and Thailand operations are included in the emission calculation. Distances are calculated by Google Maps Tool, and emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 7: Employee commuting

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

67,788

# Comment

Indirect GHG emissions from employee commuting include GHG emissions from domestic transportation of employees from home to factories and back. 100% of the employee commuting in Arçelik Turkey operations are included in the emission calculation. Distances, routes, and employee numbers are taken from Administration Department (due to contract with service contractor), and emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 8: Upstream leased assets

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

0

# Comment

We have no leased assets for storing supplied materials from suppliers.

# Scope 3 category 9: Downstream transportation and distribution

#### Base year start

January 1, 2022



# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

122,661

# Comment

EPA Center for Corporate Climate Leadership GHG Emission Factors Hub Emission Factors for Greenhouse Gas Inventories. The emission factors are taken from Table 9: Product Transport Emission Factors. All calculations are completed in accordance with ISO 14064-1:2010, and verified in accordance with ISO 14064-3 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 10: Processing of sold products

#### Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

0

# Comment

We produce and sell the final products. Due to that reason, the processing of sold products is not relevant.

# Scope 3 category 11: Use of sold products

#### Base year start

January 1, 2022

# Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

23,086,153

# Comment

Indirect GHG emissions associated with the use of sold products are the emissions generated during the use phase of Arçelik's sold products in 2022 in 10 years lifetime. Products that are taken in the scope of this GHG category are washing machines, dishwashers, refrigerators, freezers, tumble dryers, ovens, hobs, hoods, air conditioners, Turkish coffee machines, and tea-maker that are produced in Arçelik's in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh operations. In addition to these products, outsourced products such as hairdryers, iron, toaster, kettle, microwave oven, vacuum cleaners, electric kettles, water dispensers, and outsourced white goods are supplied from different countries 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 year lifetime are calculated. The energy consumption of the products is taken from energy labels. The gas capacity of refrigerators, freezers, air conditioners, and tumble dryers is used to calculate GHG emissions from refrigerant leakage. Country-specific electricity emission factors from the International Energy Agency (IEA) for 90% of countries where 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. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 12: End of life treatment of sold products

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

19,825

#### Comment

GHG emissions in this category are generated by the recycling and/or disposal process of waste electrical and electronics equipment (WEEE) when 10 year lifetime period of our sold products is ended. The products which are taken into Arçelik's GHG inventory are washing machine, dishwasher, refrigerator, top table refrigerator, tumble dryer, oven, hob, hood, air conditioners, and water dispansers produced in Arçelik's production plants in Turkey, Romania, Russia, South Africa, Pakistan, and Thailand operations. GHG emissions are calculated by multiplying product weights (as WEEE) and WEEE recycling emission factors. The weights of the products are collected from product BoM lists, R&D, and other related departments. Emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# Scope 3 category 13: Downstream leased assets

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

Comment



GHG emissions from downstream leased assets have not been calculated yet. GHG emissions in this category are not significant.

# Scope 3 category 14: Franchises

#### Base year start

January 1, 2022

#### Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

0

#### Comment

Since Arçelik does not have franchises, the GHG emissions from this category have been calculated as zero.

#### Scope 3 category 15: Investments

#### Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

#### 0

# Comment

GHG emissions of Arçelik's new factory investments is accounted in Arçelik's Scope 1&2 emissions. So, GHG emissions of factory investments are not relevant for Scope 3 emissions.

# Scope 3: Other (upstream)

# Base year start

January 1, 2022

#### Base year end

December 31, 2022

#### Base year emissions (metric tons CO2e)

26

# Comment

GHG emissions from biological wastewater treatment processes in wastewater treatment plants of the industrial zone or municipalities have been calculated and reported in this section. Chemical oxygen demand (COD) of biological wastewater in our production plants, biological wastewater amount, and emission factors from 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories - Volume 5: Waste- Chapter 6:WASTEWATER TREATMENT AND DISCHARGE are



used to calculate the GHG emissions from there. In addition to this, GHG emissions of mobile combustion of our supplier in Arctic production plant have been added in this section. All calculations are completed in accordance with ISO 14064-1:2018 and verified in accordance with ISO 14064-3:2019 standards.

# Scope 3: Other (downstream)

# Base year start

January 1, 2022

# Base year end

December 31, 2022

# Base year emissions (metric tons CO2e)

1,556

# Comment

GHG emissions from the treatment of packaging of the sold products have been calculated and reported in this section. The amounts are calculated by choosing a reference model. The products which are taken into Arçelik's GHG inventory are washing machine, dishwasher, refrigerator, top table refrigerator, tumble dryer, oven, hob, hood, air conditioners, and water dispansers produced in Arçelik's production plants in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh. GHG emissions caused by the treatment of packaging materials of sold products are calculated by using the weight, sold product number, and emission factors of treatment methods of packaging materials. Emissions factors are taken from Ecoinvent database and DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standards and ISAE 3000 Standard (only for Beko LLC Production Plant in Russia Federation).

# C5.3

# (C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006 ISO 14064-1

# C6. Emissions data

# **C6.1**

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

# **Reporting year**

Gross global Scope 1 emissions (metric tons CO2e)



# 69,797

# Comment

Arçelik's Scope 1 emissions in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh and Thailand operations have been calculated and verified as 69,797.00 tons of CO2e in 2022.

# C6.2

# (C6.2) Describe your organization's approach to reporting Scope 2 emissions.

# Row 1

# Scope 2, location-based

We are reporting a Scope 2, location-based figure

# Scope 2, market-based

We are reporting a Scope 2, market-based figure

# Comment

Our Scope 2 (location-based) emissions are emitted from grid electricity, and they are calculated by using the grid electricity emission factor from International Energy Agency (IEA) and verified by an independent third-party organization. Our Scope 2 (market-based) emissions are only emitted from the electricity supplied from renewable energy sources, and they are verified as "0" (zero) by an independent third-party organization.

# C6.3

# (C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

# Reporting year

# Scope 2, location-based

47,285

# Scope 2, market-based (if applicable)

0

# Comment

Our Scope 2 (location-based) emissions are emitted from grid electricity, and they are calculated by using the grid electricity emission factor from International Energy Agency (IEA) and verified by an independent third-party organization. Our Scope 2 (market-based) emissions are only emitted from the electricity supplied from renewable energy sources, and they are verified as "0" (zero) by an independent third-party organization.



# **C6.4**

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

# C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

# Purchased goods and services

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e) 3,571,364

# **Emissions calculation methodology**

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# Please explain

The sources of indirect GHG emissions from products used by the organization are raw materials, materials, and packaging materials used in Arcelik's sold products. The amounts are calculated by choosing the most sold product as the reference model. The products which are taken into Arcelik's GHG inventory are washing machine, dishwasher, refrigerator, top table refrigerator, tumble dryer, oven, hob, hood, air conditioners, and water dispenser produced in Arcelik's production plants in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh, and Thailand. GHG emissions caused by used materials such as plastics, metals, dyes, chemicals, and other parts of the products are calculated by using the weight, sold product number, and emission factors of used materials. Material data (material types and weights) are collected from product BoM lists, R&D, and other related departments. Emissions factors are mainly taken from Ecoinvent Database and DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# **Capital goods**

# **Evaluation status**

Not relevant, explanation provided



# **Please explain**

GHG emissions from our owned capital goods' emissions are estimated to be at a negligible quantity of our total emissions in 2022.

# Fuel-and-energy-related activities (not included in Scope 1 or 2)

# **Evaluation status**

Not relevant, explanation provided

# **Please explain**

GHG emissions from fel-and-energy-related activities (not included in Scope 1 or 2) are estimated to be at a negligible quantity of our total emissions in 2022.

# Upstream transportation and distribution

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

72,124

# **Emissions calculation methodology**

Fuel-based method Distance-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

The sources of greenhouse gas emissions from upstream transportation and distribution are road, air, railways, and water-borne navigation activities during the import of raw materials and components from suppliers to our production plants. These GHG emissions are calculated in accordance with ISO 14064-1 and verified by an independent body in accordance with ISO 14064-3 in 2021. The calculation methodology is "EPA Center for Corporate Climate Leadership: GHG Emission Factors for Greenhouse Gas Inventories". All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# Waste generated in operations

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

5,501

# **Emissions calculation methodology**

Waste-type-specific method



# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

Greenhouse gas emissions emitted during recycling or disposal of wastes generated in the production have been calculated by multiplying waste amounts and emissions factors of waste recycling or disposal processes by type. Waste amount data is collected from production areas. Emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standards and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

#### **Business travel**

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

3,020

# **Emissions calculation methodology**

Fuel-based method Distance-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

Indirect GHG emissions from business travel include GHG emissions from international and domestic travel by road, railway, and airways. 100% of business travels in Arçelik in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh, and Thailand operations are included in the emission calculation. Distances are calculated by Google MapsTool, and emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standards and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

#### **Employee commuting**

#### **Evaluation status**

Relevant, calculated

Emissions in reporting year (metric tons CO2e) 67,788

#### **Emissions calculation methodology**



Fuel-based method Distance-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

Indirect GHG emissions from employee commuting include GHG emissions from domestic transportation of employees from home to factories and back. 100% of the employee commuting in Arçelik in Turkey, Romania, Russia, South Africa, Pakistan, and Thailand operations are included in the emission calculation. Distances, routes, and employee numbers are taken from Administration Department (due to contract with service contractor), and emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standards and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# **Upstream leased assets**

# **Evaluation status**

Not relevant, explanation provided

# **Please explain**

We have no leased assets for storing supplied materials from suppliers.

# Downstream transportation and distribution

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

122,661

# **Emissions calculation methodology**

Fuel-based method Distance-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

The sources of greenhouse gas emissions from downstream transportation and distribution are road, off-road, air, railways, and water-borne navigation activities. The GHG emissions emitted by our domestic, import, and export product transportation activities have been calculated in accordance with ISO 14064-1 and verified by an independent body in accordance with ISO 14064-3 in 2021. The calculation methodology is "EPA Center for Corporate Climate Leadership: GHG Emission Factors



for Greenhouse Gas Inventories". All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# Processing of sold products

# **Evaluation status**

Not relevant, explanation provided

# **Please explain**

We produce and sell the final products. Due to that reason, the processing of sold products is not relevant.

# Use of sold products

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

23,086,153

# **Emissions calculation methodology**

Average data method

Average product method

Methodology for direct use phase emissions, please specify

GHG emissions are calculated by using energy usages, refrigerant types and capacities of related products, sales units, and electricity emission factors of sales countries.

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

Indirect GHG emissions associated with the use of products are the emissions generated during the use-phase of Arçelik's sold products in 2022 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 in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh, and Thailand operations. In addition to these products, outsourced products such as hairdryer, iron, toaster, kettle, microwave oven, vacuum cleaner, electric kettle, water dispenser, and outsourced white goods are supplied from different countries 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. The energy consumption of the products is taken from energy labels. Gas capacity of refrigerators, freezers, air conditioners, and tumble dryers is used to calculate GHG emissions from refrigerant leakage. Country-specific electricity emission factors from the International



Energy Agency (IEA) for 90% of countries where 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. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standard and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# End of life treatment of sold products

# **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e) 19,825

# **Emissions calculation methodology**

Average product method Waste-type-specific method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

GHG emissions in this category are generated by the recycling and/or disposal process of waste electrical and electronics equipment (WEEE) when 10 years lifetime period of our sold products is ended. The products which are taken into Arçelik's GHG inventory are washing machine, dishwasher, refrigerator, top table refrigerator, tumble dryer, oven, hob, hood, air conditioners, and water dispansers produced in Arçelik's production plants in in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh and Thailand operations. GHG emissions are calculated by multiplying product weights (as WEEE) and WEEE recycling emission factors. The weights of the products are collected from product BoM lists, R&D, and other related departments. Emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2022 published by the UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standards and ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# **Downstream leased assets**

# **Evaluation status**

Not relevant, explanation provided

# **Please explain**

GHG emissions from downstream leased assets have not been calculated yet. GHG emissions in this category are not significant.

# Franchises

# **Evaluation status**



Not relevant, explanation provided

#### **Please explain**

Arçelik has no franchising activities.

# Investments

#### **Evaluation status**

Not relevant, explanation provided

#### **Please explain**

GHG emissions of Arçelik's new factory investments will be accounted in Arçelik's Scope 1&2 emissions. So, GHG emissions of factory investments are not relevant for Scope 3 emissions.

#### Other (upstream)

#### **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

26

# **Emissions calculation methodology**

Average data method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# **Please explain**

GHG emissions from biological wastewater treatment processes in wastewater treatment plants of the industrial zone or municipalities have been calculated and reported in this section. Chemical oxygen demand (COD) of biological wastewater in our production plants, biological wastewater amount, and emission factors from 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories - Volume 5: Waste- Chapter 6:WASTEWATER TREATMENT AND DISCHARGE are used to calculate the GHG emissions from there. In addition to this, GHG emissions of mobile combustion of our supplier in Arctic production plant has been added in this section. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standardand ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

#### Other (downstream)

#### **Evaluation status**

Relevant, calculated

# Emissions in reporting year (metric tons CO2e)

1,556



# **Emissions calculation methodology**

Average product method Waste-type-specific method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

# Please explain

GHG emissions from the treatment of packaging of the sold products have been calculated and reported in this section. The amounts are calculated by choosing a reference model for each product category in production plants in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh. GHG emissions caused by the treatment of packaging materials of sold products are calculated by using the weight, sold product number, and emission factors of treatment methods of packaging materials. Emissions factors are taken from DEFRA Greenhouse Gas Reporting: Conversion Factors 2021 published by UK Government. All calculations are completed in accordance with ISO 14064-1:2018, and verified in accordance with ISO 14064-3:2019 standardsand ISAE3000 standard (only for Beko LLC Production Plant in Russia Federation).

# C6.7

# (C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

# **C6.7**a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	59.23	GHG emissions generated during wastewater treatment of biological wastewater generated in Arçelik's operations in Turkey, Romania, Russia, South Africa, Pakistan, Bangladesh, and Thailand have been calculated as 39 tonnes of CO2e in 2022. This amount covers GHG emissions generated in wastewater treatments in production plants, industrial zones, or municipalities. In addition to this, a small amount of biodiesel used in the production plant in Thailand caused 20.23 tonnes of CO2e as anthropogenic biogenic GHG emission in 2022. So total biogenic GHG emissions in 2022 have been calculated as 59.23 tonnes of CO2e in 2022.



# **C6.10**

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

# Intensity figure

0.0000012

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

117,082

# Metric denominator unit total revenue

unit total revenue

# Metric denominator: Unit total 97,223,218,768

Scope 2 figure used Location-based

% change from previous year 60

Direction of change

Decreased

# Reason(s) for change

Other emissions reduction activities Change in revenue

# Please explain

Scope 1 and Scope 2 greenhouse gas emissions per revenue decreased by 60% in 2022 compared to the previous year. One of the main reasons is the fluctuation between foreign currencies and Turkish Lira (TL). Since the reporting currency of Arçelik is TL, all revenue has been converted to TL, which caused an increase in the denominator, so a decrease in the intensity figure.

In addition, energy reduction projects and electricity supplied from renewable sources are provided to reduce total Scope 1 and Scope 2 emissions. 290 energy-saving projects at production sites (Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh) have been implemented which resulted in a total annual energy conservation of around 119,244 GJ. As a result, 9,087 tonnes of CO2 e emissions were avoided in 2022 annually.



# **C7. Emissions breakdowns**

# **C7.1**

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

# C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	57,685	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	123	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	172	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	10,867	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	53	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify Chemicals	897	IPCC Fifth Assessment Report (AR5 – 100 year)

# **C7.2**

# (C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Turkey	34,917
Romania	6,934
Russian Federation	8,467
South Africa	3,649
Pakistan	12,867
Thailand	660
Bangladesh	2,303



# **C7.3**

# (C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

# C7.3b

# (C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Ankara Dishwasher Plant - Turkey	2,067	39.97582	32.563568
Çerkezköy Tumble Dryer and Electric Motors Plant - Turkey	2,745	41.306196	27.965484
Bolu Cooking Appliances Plant - Turkey	10,063	40.763176	31.64291
Çerkezköy Electronics Plant - Turkey	1,583	41.31463	27.97888
Eskişehir Refrigerator and Compressor Plant - Turkey	9,059	39.746225	30.618559
Çayırova Washing Machine Plant - Turkey	6,198	40.821279	29.361822
Sütlüce Headquarter - Turkey	1,495	41.047518	28.941751
Arctic Refrigerating Appliances Plant – Gaesti, Romania	6,263	44.7136	25.340552
Arctic Washing Machine Plant – Ulmi, Romania	671	44.87399	25.507652
Beko LLC Refrigerator and Washing Machine Plant – Kirzhach, Russia	8,467	56.105792	38.84756
Defy Cooking Appliances, Tumble Dryer and Washing Machine Plant – Jacobs, South Africa	3,044	-29.92353	30.974529
Defy Refrigerating Appliances Plant – Ezakheni, South Africa	605	- 28.639284	29.84094
Dawlance Uril Refrigerator Plant – Hyderabad, Pakistan	4,550	25.073671	67.666345
Dawlance DPL 1 Washing Machine and Refrigerator Plant – Karachi, Pakistan	600	24.854034	67.2216



Dawlance DPL 2 Cooking Appliances and A/C Plant – Karachi, Pakistan	7,717	24.855077	67.227685
Beko Thai Refrigerator Plant – Rayong, Thailand	660	12.818289	101.250272
Manisa Washing Machine and Refrigerator Plant - Turkey	1,707	38.714933	27.333727
Singer SMC Production Plant - Dakha, Bangladesh	925	23.813076	90.257322
Singer SRP Production Plant - Dakha, Bangladesh	1,378	23.793512	90.272365

# C7.5

# (C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Turkey	0	0
Romania	0	0
Russian Federation	7,824	0
South Africa	24,905.45	0
Pakistan	10,155.3	0
Thailand	3,859.25	0
Bangladesh	541	0

# **C7.6**

# (C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

# C7.6b

# (C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Ankara Dishwasher Plant, Turkey	0	0
Çerkezköy Tumble Dryer and Electric	0	0



Motors Plant, Turkey		
Bolu Cooking Appliances Plant, Turkey	0	0
Çerkezköy Electronics Plant, Turkey	0	0
Eskişehir Refrigerator and Compressor Plant, Turkey	0	0
Çayırova Washing Machine Plant, Turkey	0	0
Sütlüce Headquarter, Turkey	0	0
Arctic Refrigerating Appliances Plant – Gaesti, Romania	0	0
Arctic Washing Machine Plant – Ulmi, Romania	0	0
Beko LLC Refrigerator and Washing Machine Plant – Kirzhach, Russia	7,824	0
Defy Cooking Appliances, Tumble Dryer and Washing Machine Plant – Jacobs, South Africa	9,959.67	0
Defy Refrigerating Appliances Plant – Ezakheni, South Africa	14,945.78	0
Dawlance Uril Refrigerator Plant – Hyderabad, Pakistan	4,049.68	0
Dawlance DPL 1 Washing Machine and Refrigerator Plant – Karachi, Pakistan	2,962.8	0
Dawlance DPL 2 Cooking Appliances and A/C Plant – Karachi, Pakistan	3,142.83	0
Beko Thai Refrigerator Plant – Rayong, Thailand	3,859.25	0
Manisa Washing Machine and Refrigerator Plant - Turkey	0	0
Singer SMC Production Plant - Dakha, Bangladesh	78	0
Singer SRP Production Plant - Dakha, Bangladesh	463	0



# C7.7

# (C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

# C7.7a

# (C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

# Subsidiary name Arctic Gaesti Refrigerating Appliances Plant & Ulmi Washing Machine Plant (Romania) **Primary activity** Household appliances Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier **ISIN** code – bond **ISIN code – equity CUSIP** number **Ticker symbol** SEDOL code LEI number Other unique identifier Scope 1 emissions (metric tons CO2e) 6.934 Scope 2, location-based emissions (metric tons CO2e) 0 Scope 2, market-based emissions (metric tons CO2e) 0 Comment



Arctic in Romania is one of Arçelik's subsidiaries. Two production plants of the Arctic are already in Arçelik's GHG inventory and Scope 1 and 2 GHG emissions have already been shared in C7.2, C7.3b, C7.5, and C7.6b.

Since the electricity purchased was supplied from renewable sources in 2022, marketbased Scope 2 emissions have been calculated as zero, and verified by a third party. There is no location-based Scope 2 emissions in Arctic production plants.

# **Subsidiary name**

Dawlance DPL 1 & DPL 2 & URIL Production Plants (Pakistan)

#### **Primary activity**

Household appliances

Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

ISIN code - bond

**ISIN code – equity** 

**CUSIP** number

**Ticker symbol** 

SEDOL code

#### LEI number

#### Other unique identifier

- Scope 1 emissions (metric tons CO2e) 12.867
- Scope 2, location-based emissions (metric tons CO2e) 10,155.3

Scope 2, market-based emissions (metric tons CO2e)

#### Comment

Dawlance in Pakistan is one of Arçelik's subsidiaries. Three production plants of the Dawlance are already in Arçelik's GHG inventory and Scope 1 and 2 GHG emissions have already been shared in C7.2, C7.3b, C7.5, and C7.6b. Scope 1 emissions of three



production plants of Dawlance have been calculated as 12,867 tonnes of CO2e, and location-based Scope 2 emissions have been calculated as 10,155.3 tonnes of CO2e by using the IEA emission factor for Pakistan. Since no electricity has been supplied from renewable sources, there is no market-based Scope 2 emissions.

#### Subsidiary name

Defy Jacobs & Ezakheni Production Plants (South Africa)

#### Primary activity

Household appliances

#### Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

#### **ISIN** code – bond

- **ISIN code equity**
- **CUSIP** number

**Ticker symbol** 

#### SEDOL code

#### LEI number

#### Other unique identifier

### Scope 1 emissions (metric tons CO2e)

3.649

## Scope 2, location-based emissions (metric tons CO2e)

24,905.45

#### Scope 2, market-based emissions (metric tons CO2e)

Λ

#### Comment

Defy in South Africa is one of Arcelik's subsidiaries. Two production plants of the Defy are already in Arcelik's GHG inventory and Scope 1 and 2 GHG emissions have already been shared in C7.2, C7.3b, C7.5, and C7.6b. Scope 1 emissions of two production plants of Defy have been calculated as 3,649 tonnes of CO2e, and location-based Scope 2 emissions have been calculated as 24,907.45 tonnes of CO2e by using the IEA



emission factor for South Africa. Since no electricity has been supplied from renewable sources, there is no market-based Scope 2 emissions.

	sidiary name
;	Singer SMC & SRP Production Plants (Bangladesh)
Prin	nary activity
I	Household appliances
	ct the unique identifier(s) you are able to provide for this subsidiary No unique identifier
ISIN	code – bond
ISIN	code – equity
CUS	IP number
Tick	er symbol
SED	OL code
LEI	number
Othe	er unique identifier
	pe 1 emissions (metric tons CO2e) 2,303
	pe 2, location-based emissions (metric tons CO2e)
	pe 2, market-based emissions (metric tons CO2e)
	iment
	Singer in Bangladesh is one of Arçelik's subsidiaries. Two production plants of the
	Singer are already in Arçelik's GHG inventory and Scope 1 and 2 GHG emissions have
	already been shared in C7.2, C7.3b, C7.5, and C7.6b. Scope 1 emissions of two production plants of Singer have been calculated as 2,303 tonnes of CO2e, and
	ocation-based Scope 2 emissions have been calculated as 5,303 tonnes of CO2e, and
	using the IEA emission factor for Bangladesh. Since no electricity has been supplied

from renewable sources, there is no market-based Scope 2 emissions.



#### Subsidiary name Beko Thailand (Thailand)

#### Primary activity Household appliances

Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

ISIN code - bond

**ISIN code – equity** 

**CUSIP** number

**Ticker symbol** 

SEDOL code

LEI number

Other unique identifier

#### Scope 1 emissions (metric tons CO2e)

660

Scope 2, location-based emissions (metric tons CO2e) 3,859.25

Scope 2, market-based emissions (metric tons CO2e)

### 0

#### Comment

Beko Thailand in Thailand is one of Arçelik's subsidiaries. Beko Thailand Production Plant is already in Arçelik's GHG inventory and Scope 1 and 2 GHG emissions have already been shared in C7.2, C7.3b, C7.5, and C7.6b. Scope 1 emissions of Beko Thailand Production Plant have been calculated as 660 tonnes of CO2e, and locationbased Scope 2 emissions have been calculated as 3,859.25 tonnes of CO2e by using the IEA emission factor for Thailand. Since no electricity has been supplied from renewable sources, there is no market-based Scope 2 emissions.



Subsidiary name Beko LLC (Russia Federation))

- Primary activity Household appliances
- Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

ISIN code - bond

ISIN code - equity

**CUSIP** number

**Ticker symbol** 

SEDOL code

LEI number

Other unique identifier

#### Scope 1 emissions (metric tons CO2e)

8,467

#### Scope 2, location-based emissions (metric tons CO2e) 7,824

Scope 2, market-based emissions (metric tons CO2e)

#### 0

#### Comment

Beko LLC in Russia is one of Arçelik's subsidiaries. Beko LLC Production Plant is already in Arçelik's GHG inventory and Scope 1 and 2 GHG emissions have already been shared in C7.2, C7.3b, C7.5, and C7.6b. Scope 1 emissions of Beko Russia Production Plant have been calculated as 8,467 tonnes of CO2e, and location-based Scope 2 emissions have been calculated as 7,824 tonnes of CO2e by using the IEA emission factor for Russia. Since no electricity has been supplied from renewable sources, there is no market-based Scope 2 emissions.



## **C7.9**

# (C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

### C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	While total renewable electricity was 250,468 MWh in 2021, it realized a 1.5% increase to 254,415 MWh in 2022. (((254,415 - 250,468)/250,468)*100 = 1.5%) However, since the total consumed electricity increased in 2022 due to the expansion of scope with our new plants (Bangladesh, Manisa) the share of renewable electricity decreased slightly compared to 2021. Since GHG emissions from renewable sources have been calculated as zero, there is no change in 2022 when compared to the previous year.
Other emissions reduction activities	9,087	Decreased	7	Thanks to our energy efficiency projects in our production plants in Turkey, Romania, Russia, South Africa, Pakistan, Thailand, and Bangladesh, we prevent 9,087 tonnes of CO2e which provided us to reduce our total Scope 1 and Scope 2 emissions 7%. Calculation: Scope 1+2 emissions in 2021: 130,379 tonnes CO2e Scope 1+2 emissions reduction from the other emissions reduction activities: 9,087 tonnes CO2e % change: (9,087/130,379)*100 = 7% (decrease)



Divestment	0	No change	0	There is no change related to divestment.
Acquisitions	4,551	Increased	3.5	Manisa production plants in Turkey and Singer production plants in Bangladesh have been included in Arçelik's GHG inventory in 2022. Total Scope 1 and Scope 2 emissions of these plants have been calculated as 4,551 tonnes of CO2e. If there are no energy efficiency projects realized in 2022, our Scope 1 and Scope 2 emissions would have been increased by at least the same amount as these new production plants, and this would have caused a 3.5% increase in our total Scope 1 and Scope 2 emissions when compared to 2021. Calculation: Scope 1+2 emissions in 2021: 130,379 tonnes CO2e Scope 1+2 emissions from the acquisition in 2022: 4,551 tonnes CO2e % change: (4,551/130,379)*100 = 3.5% (increase) However, thanks to our energy efficiency projects realized in 2022 and changes in production numbers, total Scope 1+2 emissions have decreased by 10,21% instead of an increase.
Mergers	0	No change	0	There is no change related to mergers.
Change in output	4,228	Decreased	3.2	Thanks to our energy efficiency projects realized in 2022 and changes in production numbers, total Scope 1+2 emissions have decreased by 13,315 tonnes of CO2e compared to 2021. 9,087 tonnes of this reduction has been provided by energy efficiency projects and the remaining 4,228 tonnes of CO2e has been generated by production number changes in 2022 compared to 2021. Changes in output decreased our total Scope 1+2 emissions 3.2%. Calculation: Scope 1+2 emissions in 2021: 130,379 tonnes CO2e Scope 1+2 emissions due to change in



				output in 2022: 4,228 tonnes CO2e % change: (4,228/130,379)*100 = 3.2% (decrease)
Change in methodology	0	No change	0	There is no change in the GHG calculation methodology.
Change in boundary	4,551	Increased	3.5	Manisa production plants in Turkey and Singer production plants in Bangladesh have been included in Arçelik's GHG inventory in 2022. Total Scope 1 and Scope 2 emissions of these plants have been calculated as 4,551 tonnes of CO2e. If there are no energy efficiency projects realized in 2022, our Scope 1 and Scope 2 emissions would have been increased by at least the same amount as these new production plants, and this would have caused a 3.5% increase in our total Scope 1 and Scope 2 emissions when compared to 2021. Calculation: Scope 1+2 emissions in 2021: 130,379 tonnes CO2e Scope 1+2 emissions from the acquisition: 4,551 tonnes CO2e % change: (4,551/130,379)*100 = 3.5% (increase) However, thanks to our energy efficiency projects realized in 2022 and changes in production numbers, total Scope 1+2 emissions have decreased by 10,21% instead of an increase.
Change in physical operating conditions	0	No change	0	There is no change in physical operating conditions.
Unidentified	0	No change	0	There is no change due to unidentified conditions.
Other	0	No change	0	There is no change due to other conditions.

### C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?



Location-based

## C8. Energy

### **C8.1**

# (C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 10% but less than or equal to 15%

### **C8.2**

#### (C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy- related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

### **C8.2**a

# (C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non- renewable sources	Total (renewable and non- renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	279.48	276,460.63	276,740.11
Consumption of purchased or acquired electricity		251,425.85	82,426.5	333,852.34



Consumption of purchased or acquired heat	0	1,251.48	1,251.48
Consumption of self- generated non-fuel renewable energy	2,989.69		2,989.69
Total energy consumption	254,695.02	360,138.6	614,833.62

### C8.2b

#### (C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

### C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

**Total fuel MWh consumed by the organization** 279.48

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat 279.48

### MWh fuel consumed for self-generation of steam

0



## MWh fuel consumed for self- cogeneration or self-trigeneration

#### Comment

Breakdown of the "Sustainable Biomass" that Arçelik consumed during the reporting year is given below. All the fuels are calculated based on their Higher Heating Value (HHV). Bioethanol: 86.49 MWh and consumed only for self-generation of heat. Biodiesel: 192.99 MWh and consumed only for self-generation of heat. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

#### **Other biomass**

Heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

#### Comment

"Other Biomass" is not consumed. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

#### Other renewable fuels (e.g. renewable hydrogen)

Heating value HHV	
Total fuel MWh co 0	nsumed by the organization
MWh fuel consum 0	ed for self-generation of electricity
MWh fuel consum 0	ed for self-generation of heat
MWh fuel consum 0	ed for self-generation of steam



## MWh fuel consumed for self- cogeneration or self-trigeneration

#### Comment

"Other Renewable Fuels" are not consumed. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

#### Coal

## **Heating value** HHV Total fuel MWh consumed by the organization 0 MWh fuel consumed for self-generation of electricity 0 MWh fuel consumed for self-generation of heat 0 MWh fuel consumed for self-generation of steam 0 MWh fuel consumed for self- cogeneration or self-trigeneration 0 Comment "Coal" is not consumed. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations. Heating value

HHV Total fuel MWh consumed by the organization 0 MWh fuel consumed for self-generation of electricity 0 MWh fuel consumed for self-generation of heat 0 MWh fuel consumed for self-generation of steam 0 MWh fuel consumed for self-cogeneration or self-trigeneration 0

Oil



#### Comment

"Oil" is not consumed. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

#### Gas

#### Heating value

HHV

#### Total fuel MWh consumed by the organization

229,781.91

## MWh fuel consumed for self-generation of electricity 6,387.6

## MWh fuel consumed for self-generation of heat 187,904.81

MWh fuel consumed for self-generation of steam 12,087.17

## MWh fuel consumed for self- cogeneration or self-trigeneration 23,402.33

#### Comment

"Gas" or a.k.a. "Natural Gas" is consumed for self-generation of heat and also selfcogeneration. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

#### Other non-renewable fuels (e.g. non-renewable hydrogen)

#### **Heating value**

HHV

## Total fuel MWh consumed by the organization 46,678.71

## MWh fuel consumed for self-generation of electricity 7.506.92

## MWh fuel consumed for self-generation of heat 38,959.14

#### MWh fuel consumed for self-generation of steam

0

## MWh fuel consumed for self- cogeneration or self-trigeneration 212.66

#### Comment



Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations. Breakdown of tther non-renewable fuels that Arçelik consumed during the reporting year is given below. All the fuels are calculated based on their Higher Heating Value (HHV). Acetylene: Total of 998.82 MWh and consumed 100% for self-generation of heat. Diesel: Total of 23,444,79 MWh and consumed 32% for-self generation of electricity, 68% for self-generation of heat. Fuel-Oil No.4: Total of 107.46 MWh and consumed 100% for self-generation of co-generation. LPG: Total of 9,626.0 MWh and consumed 100% for self-generation of heat. Methane: Total of 7.91 MWh and consumed 100% for self-generation of heat. Butane: Total of 3.65 MWh and consumed 100% for selfgeneration of heat. Motor Gasoline: Total of 10,816.54 MWh and consumed 100% for self-generation of heat. Propane: Total of 1,417.65 MWh and consumed 100% of self generation of heat. Industrial Base Oil: Total of 105.2 MWh and consumed 100% for self-generation of heat.

#### Total fuel

#### **Heating value**

HHV

- Total fuel MWh consumed by the organization 276.740.11
- MWh fuel consumed for self-generation of electricity 13,894.51
- MWh fuel consumed for self-generation of heat 227,143.44

### MWh fuel consumed for self-generation of steam

12,087.17

## MWh fuel consumed for self- cogeneration or self-trigeneration 23,614.99

#### Comment

Total fuel consumption of Arçelik during the reporting period are given. Data coverage: Arçelik Turkey, Arctic Romania, Beko LLC Russia, Defy South Africa, Beko Thailand, Dawlance Pakistan and Singer Bangladesh operations.

### C8.2d

# (C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
			e v v



Electricity	5,706.92	5,706.92	2,989.69	2,989.69
Heat	52,917	52,917	0	0
Steam	12,675.9	12,675.9	0	0
Cooling	22,029.78	22,029.78	0	0

### C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

### Country/area of low-carbon energy consumption

Turkey

#### Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

#### **Energy carrier**

Electricity

#### Low-carbon technology type

Large hydropower (>25 MW)

## Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

96,563.07

#### Tracking instrument used

Other, please specify Turkish National Renewable Energy Guarantees of Origin System (YEK-G)

## Country/area of origin (generation) of the low-carbon energy or energy attribute

Turkey

# Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

# Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

#### Comment

"Renewable Energy Guarantees of Origin System (YEK-G) & Organized YEK-G Market" is designed to monitor all processes of the generated electricity from the producer to the consumer by utilizing the blockchain technology entirely through Energy Exchange



Istanbul\* (EXIST) or Enerji Piyasaları İşletme A.Ş. (EPİAŞ) by its Turkish name, EXIST's own means. Turkish national YEK-G system, where participation is provided entirely on a "voluntary basis", became operational on June 1, 2021. As Arçelik, we have provided 47.05% of our green electricity with EAC from hydro-electric power plant with 44.1 MW installed capacity which locates in Turkey, under the guarantee of Turkish National Renewable Energy Guarantees of Origin System (YEK-G).

\*Energy Exchange Istanbul (EXIST) or Enerji Piyasaları İşletme A.Ş. (EPİAŞ) by its Turkish name is an energy exchange company was established on March 18, 2015. EXIST, legally incorporated under the Turkish Electricity Market Law and enforced by the Energy Markets Operation License granted by the Energy Markets Regulatory Authority (EMRA) of Turkey. EXIST is responsible for managing and operating energy markets, including power and gas commodities. EXIST ensures transparent, reliable and trustworthy market conditions by providing a central counterparty service. As an energy exchange EXIST, provides market environments where Exchange members send their orders to buy or sell energy in determined delivery platforms. Its task is to carry out matching all buy or sell orders in transparent manner, according to the regulatory manner and to establish a reference price.

#### Country/area of low-carbon energy consumption Turkey

#### Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

#### **Energy carrier**

Electricity

#### Low-carbon technology type

Geothermal

## Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

108,690.99

#### Tracking instrument used

Other, please specify Turkish National Renewable Energy Guarantees of Origin System (YEK-G)

## Country/area of origin (generation) of the low-carbon energy or energy attribute

Turkey

## Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes



# Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

#### Comment

"Renewable Energy Guarantees of Origin System (YEK-G) & Organized YEK-G Market" is designed to monitor all processes of the generated electricity from the producer to the consumer by utilizing the blockchain technology entirely through Energy Exchange Istanbul\* (EXIST) or Enerji Piyasaları İşletme A.Ş. (EPİAŞ) by its Turkish name, EXIST's own means. Turkish national YEK-G system, where participation is provided entirely on a "voluntary basis", became operational on June 1, 2021. As Arçelik, we have provided 52.95% of our green electricity with EAC from two geothermal power plant with 114.9 MW and 80 MW installed capacity which locates in Turkey, under the guarantee of Turkish National Renewable Energy Guarantees of Origin System (YEK-G). \*Energy Exchange Istanbul (EXIST) or Enerji Piyasaları İşletme A.Ş. (EPİAŞ) by its Turkish name is an energy exchange company was established on March 18, 2015. EXIST, legally incorporated under the Turkish Electricity Market Law and enforced by the Energy Markets Operation License granted by the Energy Markets Regulatory Authority (EMRA) of Turkey. EXIST is responsible for managing and operating energy markets, including power and gas commodities. EXIST ensures transparent, reliable and trustworthy market conditions by providing a central counterparty service. As an energy exchange EXIST, provides market environments where Exchange members send their orders to buy or sell energy in determined delivery platforms. Its task is to carry out matching all buy or sell orders in transparent manner, according to the regulatory manner and to establish a reference price.

#### Country/area of low-carbon energy consumption

Romania

#### Sourcing method

Other, please specify

Power Purchase Agreement with a Local Supplier that has a strong renewable energy portfolio

#### **Energy carrier**

Electricity

#### Low-carbon technology type

Low-carbon energy mix, please specify Hydro, Solar, Wind, Biomass and Other Renewables

# Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

46,171.79

#### Tracking instrument used



Other, please specify Statement on the Provision of Renewable Electricity

# Country/area of origin (generation) of the low-carbon energy or energy attribute

Romania

## Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

# Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1900

#### Comment

We are purchasing our electricity from a local supplier, which has a huge renewable portfolio. At th end of each year, they are sharing a statement (Statement on the Provision of Renewable Electricity) to explain the electricity supplied to Arctic Romania is generated from renewable sources. With this statement, Arctic Romania's energy consumption is verified with AA1000 Assurance Standard by an independent 3rd party. Since electricity supplied from grid with different renewable sources (as Renewable Energy Mix), there is no specific commissioning year for specific power plant. Therefore commissioning year has been filled as 1900.

### C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area Turkey	
Consumption of 205,254.06	purchased electricity (MWh)
Consumption of s 2,110.34	self-generated electricity (MWh)
Consumption of	purchased heat, steam, and cooling (MWh)
1,251.48	



#### 259,276.07

Rom	nania						
Consumption of purchased electricity (MWh) 46,171.79							
	Consumption of self-generated electricity (MWh) 1,003.26						
Consun 0	Consumption of purchased heat, steam, and cooling (MWh) 0 Consumption of self-generated heat, steam, and cooling (MWh) 2,268.48						
Total no	on-fuel energy consumption (MWh) [Auto-calculated]						
49,4	43.53						
Country Ruse	<b>y/area</b> sian Federation						
	nption of purchased electricity (MWh) 62.95						
<b>Consun</b> 2.96	nption of self-generated electricity (MWh)						
Consun 0	nption of purchased heat, steam, and cooling (MWh)						
<b>Consun</b> 33,8	nption of self-generated heat, steam, and cooling (MWh)						
Total no	on-fuel energy consumption (MWh) [Auto-calculated]						
	764.91						

#### Country/area South Africa

Consumption of purchased electricity (MWh) 26,823.29

42.73

Consumption of self-generated electricity (MWh)



Consumption of purchased heat, steam, and cooling (MWh) 0 Consumption of self-generated heat, steam, and cooling (MWh) 0 Total non-fuel energy consumption (MWh) [Auto-calculated] 26,866.02 Country/area Thailand Consumption of purchased electricity (MWh) 8,095.76 Consumption of self-generated electricity (MWh) 193.64 Consumption of purchased heat, steam, and cooling (MWh) 0 Consumption of self-generated heat, steam, and cooling (MWh) 0 Total non-fuel energy consumption (MWh) [Auto-calculated] 8,289.4 Country/area Pakistan Consumption of purchased electricity (MWh) 25,651.29 Consumption of self-generated electricity (MWh) 851.24 Consumption of purchased heat, steam, and cooling (MWh) 0 Consumption of self-generated heat, steam, and cooling (MWh)



#### Total non-fuel energy consumption (MWh) [Auto-calculated]

27,145.59

#### Country/area

Bangladesh

#### Consumption of purchased electricity (MWh) 993.2

#### Consumption of self-generated electricity (MWh) 1,502.76

# Consumption of purchased heat, steam, and cooling (MWh) $_{\rm 0}$

Consumption of self-generated heat, steam, and cooling (MWh) 152.33

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,648.29

## **C9. Additional metrics**

### **C9.1**

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description Waste Metric value 114,062 Metric numerator tonnes Metric denominator (intensity metric only) % change from previous year 16.07 Direction of change Decreased



#### **Please explain**

Although waste reporting boundaries were extended in 2022, the total waste (hazardous, non-hazardous, and packaging waste) amount has decreased by 16.07% in 2022 compared to the previous year, thanks to waste prevention, reduction, and minimization projects in Arçelik's production plants. Manisa production plants in Turkey and Singer production plants in Bangladesh were covered in the waste reporting in 2022, in addition to production plants in Turkey, Romania, Russia, Thailand, Pakistan, and South Africa in 2021. Waste amount in 2021 (ton): 135,899

Waste amount in 2022 (ton): 114,062

% change from the previous year: 16.07 (Decrease)

Description

Energy usage

Metric value 2,204,281

Metric numerator

GJ

Metric denominator (intensity metric only)

% change from previous year 8.4

#### **Direction of change**

Decreased

#### **Please explain**

Although energy reporting boundaries were extended in 2022, the total energy usage has decreased by 8.40% in 2022 compared to the previous year, thanks to energy efficiency and reduction projects in Arçelik's production plants. Manisa production plants in Turkey and Singer production plants in Bangladesh were covered in the energy reporting in 2022, in addition to production plants in Turkey, Romania, Russia, Thailand, Pakistan, and South Africa in 2021. Energy consumption in 2021 (GJ): 2,406,315 Energy consumption in 2022 (GJ): 2,204,281 % change from the previous year: 8.40 (Decrease)



## C10. Verification

## C10.1

# (C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place Annual process Status in the current reporting year Complete Type of verification or assurance Reasonable assurance Attach the statement Arcelik\_ISO\_14064\_Verification\_and\_Renewable\_Energy\_Certificates\_2022.pdf **Page/ section reference** Pages 1-4: ISO 14064 Verification Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh Pages 5-6: ISO 14064 Verification Opinion Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh from third-party verification company Pages 7-26: Renewable energy certificates for HQ and production plants in Turkey and Romania **Relevant standard** ISO14064-3 Proportion of reported emissions verified (%) 100



#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

Arcelik\_Beko LLC\_ISAE 3000\_Assurance Report\_and\_Verification\_Opinion\_Statement\_2022.pdf

#### Page/ section reference

Pages 1-4: ISAE 3000 Verification Certificate including Scope 1 (direct emissions) for Beko LLC Production Plant in Russia Pages 5-6: ISAE 3000 Verification Opinion Statement from third-party verification company for Beko LLC Production Plant in Russia Federation

#### **Relevant standard**

ISAE3000

Proportion of reported emissions verified (%)

100

### C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach Scope 2 location-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Reasonable assurance

#### Attach the statement

Arcelik\_ISO\_14064\_Verification\_and\_Renewable\_Energy\_Certificates\_2022.pdf

#### Page/ section reference



Pages 1-4: ISO 14064 Verification Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh

Pages 5-6: ISO 14064 Verification Opinion Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh from third-party verification company

Pages 7-26: Renewable energy certificates for HQ and production plants in Turkey and Romania

#### **Relevant standard**

ISO14064-3

#### Proportion of reported emissions verified (%)

100

### Scope 2 approach

Scope 2 market-based

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Reasonable assurance

#### Attach the statement

Arcelik\_ISO\_14064\_Verification\_and\_Renewable\_Energy\_Certificates\_2022.pdf

#### Page/ section reference

Pages 1-4: ISO 14064 Verification Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh

Pages 5-6: ISO 14064 Verification Opinion Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh from third-party verification company

Pages 7-26: Renewable energy certificates for HQ and production plants in Turkey and Romania (for market-based Scope 2 emissions verified as zero)

#### **Relevant standard**

ISO14064-3

#### Proportion of reported emissions verified (%)

100

#### Scope 2 approach

Scope 2 location-based



#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

Arcelik\_Beko LLC\_ISAE 3000\_Assurance Report\_and\_Verification\_Opinion\_Statement\_2022.pdf

#### Page/ section reference

Pages 1-4: ISAE 3000 Verification Certificate including Scope 2 (indirect- energy emissions) for Beko LLC Production Plant in Russia Pages 5-6: ISAE 3000 Verification Opinion Statement from third-party verification company for Beko LLC Production Plant in Russia Federation

#### **Relevant standard**

ISAE3000

Proportion of reported emissions verified (%)

100

### C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

#### Scope 3 category

Scope 3: Purchased goods and services

- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

- Scope 3: Downstream transportation and distribution
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance



Reasonable assurance

#### Attach the statement

Arcelik\_ISO\_14064\_Verification\_and\_Renewable\_Energy\_Certificates\_2022.pdf

#### **Page/section reference**

Pages 1-4: ISO 14064 Verification Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh Pages 5-6: ISO 14064 Verification Opinion Statement for HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh from third-party verification company

#### **Relevant standard**

ISO14064-3

#### Proportion of reported emissions verified (%)

100

#### Scope 3 category

Scope 3: Purchased goods and services

Scope 3: Upstream transportation and distribution

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

Scope 3: Downstream transportation and distribution

Scope 3: Use of sold products

Scope 3: End-of-life treatment of sold products

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

Arcelik\_Beko LLC\_ISAE 3000\_Assurance Report\_and\_Verification\_Opinion\_Statement\_2022.pdf

#### **Page/section reference**

Pages 1-4: ISAE 3000 Verification Certificate including Scope 3 for Beko LLC Production Plant in Russia Pages 5-6: ISAE 3000 Verification Opinion Statement from third-party verification company for Beko LLC Production Plant in Russia Federation



Relevant standard

ISAE3000

Proportion of reported emissions verified (%) 100

## C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

## C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	AA1000 Assurance Standard & ISAE3000	The energy consumption of HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh in 2022 has been verified in accordance with AA1000 Assurance Standard. The energy consumption of the production plant in Russia in 2022 has been verified in accordance with ISAE3000 Standard.
C5. Emissions performance	Year on year change in emissions (Scope 1 and 2)	ISO 14064-3	Besides, GHG management procedures, operational instructions, "on-site" implementations, GHG emissions, uncertainty, and materiality calculations, and energy efficiency projects, yearly changes in Scope 1 and 2 emissions are also submitted to independent verification organization with "Arçelik A.Ş. Greenhouse Gas Emissions Report (2022)". In this report, yearly changes in Scope 1&2 emissions have been verified in accordance with ISO 14064-3. GHG emissions in this category of the production plant in Russia in 2022 have been verified in accordance with ISAE3000 Standard.
C5. Emissions performance	Year on year change in emissions (Scope 3)	ISO 14064-3	Besides, GHG management procedures, operational instructions, "on-site" implementations, GHG emissions, uncertainty, and materiality calculations, and energy



			efficiency projects, yearly changes in Scope 1 and 2 emissions are also submitted to independent verification organization with "Arçelik A.Ş. Greenhouse Gas Emissions Report (2022)". In this report, yearly changes in Scope 1&2 emissions in HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh have been verified in accordance with ISO 14064-3. GHG emissions in this category of the production plant in Russia in 2022 have been verified in accordance with ISAE3000 Standard.
C4. Targets and performance	Change in Scope 3 emissions against a base year (not target related)	ISO 14064-3	Besides, GHG management procedures, operational instructions, "on-site" implementations, GHG emissions, uncertainty, and materiality calculations, and energy efficiency projects' GHG performances are also submitted to independent verification organization with "Arçelik A.Ş. Greenhouse Gas Emissions Report (2022)". In this report, yearly changes in Scope 3 emissions against base year in HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh have been verified in accordance with ISO 14064-3. GHG emissions in this category of the production plant in Russia in 2022 have been verified in accordance with ISAE3000 Standard.
C9. Additional metrics	Waste data	AA1000 Assurance Standard & ISEA3000	The waste data of HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh in 2022 has been verified in accordance with AA1000 Assurance Standard. The waste data of the production plant in Russia in 2022 has been verified in accordance with ISAE3000 Standard.
C4. Targets and performance	Change in Scope 1 emissions against a base year (not target related)	ISO 14064-3	Besides, GHG management procedures, operational instructions, "on-site" implementations, GHG emissions, uncertainty and materiality calculations, and energy efficiency projects' GHG performances are also submitted to independent verification organization with "Arçelik A.Ş. Greenhouse Gas Emissions Report (2022)". In this report changes in Scope 1&2&3 emissions against the base year have been verified. In this report,



			yearly changes in Scope 1 emissions against base year in HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh have been verified in accordance with ISO 14064-3. GHG emissions in this category of the production plant in Russia in 2022 have been verified in accordance with ISAE3000 Standard.
C4. Targets and performance	Change in Scope 2 emissions against a base year (not target related)	ISO 14064-3	Besides, GHG management procedures, operational instructions, "on-site" implementations, GHG emissions, uncertainty, and materiality calculations, and energy efficiency projects' GHG performances are also submitted to independent verification organization with "Arçelik A.Ş. Greenhouse Gas Emissions Report (2022)". In this report, yearly changes in Scope 2 emissions against base year in HQ and production plants in Turkey, Romania, South Africa, Pakistan, Thailand, and Bangladesh have been verified in accordance with ISO 14064-3. GHG emissions in this category of the production plant in Russia in 2022 have been verified in accordance with ISAE3000 Standard.

## C11. Carbon pricing

### C11.1

# (C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

## C11.1d

# (C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Currently, we do not have any obligations under any carbon pricing mechanism, as there are no carbon pricing mechanisms in the countries we operate in or we are not a carbon-intensive industry.On the other hand, carbon pricing mechanisms are becoming more common day by day. For example, a market-based carbon pricing mechanism will come into force in the short term in Turkey.

Policy based carbon pricing mechanisms like ETS and carbon tax are driven by governments or public authorities and there are some regulations and rules. On the other hand, internal



carbon pricing is a voluntary mechanism and companies, financial institutions and even some public organizations apply it internally. It allows organisations to assess the financial impacts of their carbon emissions and drive low carbon investments, drive energy efficiency and navigate GHG regulations.

To manage this possible obligation, Arçelik has science-based targets to reduce GHG emissions, energy reduction targets and net zero target in 2050. Arçelik Sustainability Council contributes to these targets every year to increase energy efficiency in production, invest in renewable energy systems and increase the ratio of green electricity to reduce GHG emissions. With energy efficiency projects in Arçelik Global production plants in the last 13 years (2010-22), it has been saved nearly 1.5 Million GJ energy with 2,948 projects. Around 141,564 tCO2e emissions have been prevented since 2010. Arçelik, starting from 2012, has been using green electricity, the supply rate of green electricity in Arçelik Global has reached 65% as of 2022.

Furthermore, Arçelik had been using the Implicit Carbon Price Model since 2010. However, in 2020 it was switched to Shadow Price internal carbon pricing mechanism to drive various expenditure decisions that will result in a reduction of Arçelik's direct and indirect GHG emissions from its global business operations. A price of EUR 30 per ton of CO2e carbon is applied for investments higher than EUR 50,000 capital cost and 50 kW capacity to navigate the possible GHG regulations. As of 2021, it has been increased to 50 EUR per ton CO2e (523 TRY/ton CO2e\*). In 2022, we continued to implement the carbon price as 50 EUR per ton CO2e (868.61 TRY/ton CO2e\*\*) (2021 Average FX Rates 1 EUR = 10.46TRY\*) (2022 Average FX Rates 1 EUR = 17.3723 TRY 50 EUR= 868.61 TRY\*\*)

## C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

## C11.3

(C11.3) Does your organization use an internal price on carbon? Yes

## C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price Shadow price

How the price is determined Other, please specify



Arçelik uses a voluntary pricing method for carbon pricing. The price of carbon will be reviewed and updated according to current carbon prices around the world annually with benchmarking and external resources such as EU ETS.

#### Objective(s) for implementing this internal carbon price

Change internal behavior Drive energy efficiency Drive low-carbon investment Identify and seize low-carbon opportunities Navigate GHG regulations Stakeholder expectations Stress test investments

#### Scope(s) covered

Scope 1 Scope 2

#### Pricing approach used – spatial variance

Uniform

#### Pricing approach used - temporal variance

Evolutionary

#### Indicate how you expect the price to change over time

Arçelik had been using the Implicit Carbon Price Model\*since 2010. However, in 2020 it was switched to Shadow Price internal carbon pricing mechanism to drive various expenditure decisions that will result in a reduction of Arçelik's direct and indirect GHG emissions from its global business operations. As of 2021 a price of EUR 50 per ton of CO2e carbon is applied for investments higher than EUR 50,000 capital cost and 50 kW installed capacity. In 2022, we continued to implement the carbon price as 50 EUR per ton CO2e (868.61 TRY/ton CO2e\*\*). \* Implicit Carbon Price in Arçelik (2010-2019): Every plant has its own budget about energy efficiency improvement projects and other emission reduction projects. Thanks to these projects, GHG emissions can be reduced while efficiency improvement projects was divided by total CO2 reduction to calculate the implicit carbon price.\*\*2022 Average FX Rates 1 EUR = 17.3723TRY

# Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

868.61

# Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

868.61

#### Business decision-making processes this internal carbon price is applied to

Capital expenditure Operations Procurement



Risk management Opportunity management Value chain engagement Public policy engagement

# Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify Investments which are higher than EUR 50,000 capital cost and 50 kW installed capacity.

# Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

As of 2020, Arçelik has implemented the Internal Shadow Carbon Price mechanism to drive various expenditure decisions that would result in a reduction of Arçelik's direct and indirect emission from our global business operations. EUR 30 per ton CO2e carbon price is applied in the feasibility stage of the investments which are higher than EUR 50,000 capital cost and 50 kW installed capacity. As of 2021, we have increased the carbon shadow price from 30 EUR to 50 EUR per tCO2e according to trend in EU ETS. In 2022, we continued to implement the carbon price as 50 EUR per ton CO2e (868.61 TRY/ton CO2e\*).Thanks to shadow carbon price mechanism, Arçelik is getting ready for possible upcoming carbon regulations, decreasing its own energy consumption and GHG emissions during the investments' expected life time with the choice of more energy efficient, it helps to change the internal behavior while increasing the energy efficiency. Thanks to risks and opportunities analyses of Trucost ESG Analyse, stress test has been conducted as low, moderate and high carbon price scenarios, based on 2030 and 2050 projections.

Arçelik's internal carbon price approach can be found as publicly available in Sustainability Report 2022<sup>\*\*</sup> page 51. In Page 231, stress test of Trucost ESG Analyse can be found, as low, moderate and high carbon price scenarios. In Page 232-233, risks and opportunities of high carbon price scenario is given.

In conducting the policy-related risks and the price of carbon, S&P's Trucost ESG Analysis services have been utilized, including the Corporate Carbon Pricing Tool, which analyzes the carbon price risks premium based on High, Medium and Low carbon price scenarios based on the responsiveness level of each scenario to limit the warming to 2 degrees Celcius. The scenario analyses are based on 2030 and 2050 projections. \*2022 Average FX Rates 1 EUR = 17.3723 TRY

\*\*Sustainability Report 2022 :

https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf

## C12. Engagement

### C12.1

#### (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers



Yes, our customers/clients Yes, other partners in the value chain

## C12.1a

#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

#### Type of engagement

Information collection (understanding supplier behavior)

#### **Details of engagement**

Collect GHG emissions data at least annually from suppliers Collect targets information at least annually from suppliers Collect climate-related risk and opportunity information at least annually from suppliers Collect other climate related information at least annually from suppliers

#### % of suppliers by number

49

#### % total procurement spend (direct and indirect)

83.5

## % of supplier-related Scope 3 emissions as reported in C6.5

#### Rationale for the coverage of your engagement

Arcelik has an extensive supplier network, the awareness level in terms of approaching sustainability as a business model is not the same throughout this extensive network.Our explicit statement is to not work with suppliers that do not establish those systems in their production facilities until the specified deadlines have been communicated to our suppliers. The strategy here is to transform our suppliers together with Arcelik and to share best practices. By 2023:We will not work with suppliers that do not have ISO14001. By 2025, we will not work with our suppliers that do not have ISO 50001 which consumes energy over 1000 ToE. We started to collect environmental data from suppliers such as GHG emissions, energy consumption, &get them to set water, waste, energy, GHG emission reduction targets. We have publicly declared that we will enable our suppliers to set these targets publicly available as of the end of 2023. As of 2025, we have committed to collect environmental data such as Scope 1&2 GHG emissions of our suppliers, corresponding to 90% of our purchasing volume. Quantitative environmental data collection part including GHG emissions is important to emphasize our rationale behind this effort. We conduct this process, Supplier Sustainability Data Monitoring in collaboration with a third-party company. This assessment is made to critical suppliers which are amongst the 90% of purchasing volume significant impact on company operations in terms of high purchasing volume, critical components provided or being non-substitutable. As of 2025, we have committed to collect the Scope 1-2 emissions, water withdrawal, wastewater, recycled water, hazardous and non-hazardous waste, energy consumption data for more than 450



suppliers, corresponding to 90% of our purchasing volume. In 2022, we collected environmental data from 159 suppliers, 237 suppliers have been assessed through the in-house Sustainable Supplier Index. We want to transform together with our supply chain and minimize the impact of the operations in the value chain in total. Therefore, it is important that we help and guide our suppliers set environmental targets, measure their progress, and reduce their impact. In November 2021, we started to circulate a "Commitment Letter" to our suppliers explaining our sustainability strategy, our sustainability credentials,our SBT and 2030 environmental targets.

#### Impact of engagement, including measures of success

Assessment comprises ESG questions including EMS, compliance with legislation, monitoring (e.g. scope 1&2 GHG emissions), and other environmental sustainability activities. Each question has a point and weight. The sustainability risk levels of the suppliers are determined as high, medium, acceptable, good, and excellent. The thirdparty firm provides us with the supplier data monitoring software platform, works in close collaboration with the suppliers, acts as an advisor for the suppliers. The aim is to understand our suppliers' ESG-related risks and opportunities by collecting and analyzing their data. Our main intention is to enable Scope 3 reduction in the value chain. In 2022, a total of 237 out of 488 (49%) unique significant suppliers have been assessed through the in-house Sustainable Supplier Index. 159 suppliers were assessed within Arcelik's assessment in collaboration made with a third party. 128 thirdparty ethics audits were completed. 74.3% of the suppliers assessed are from Türkiye, 14.3% from Asia, and 11.4% from Europe. In terms of supplier capacity improvement projects, our employees also conduct on-site visits to the suppliers to cooperate on issues on cycle time improvement, energy efficiency, and quality. 186 on-site visits to 594 suppliers have been completed by Arcelik employees. A total of 44 quality on-site audits based on quality improvement have been made in 2022.

In the supplier selection process, all potential suppliers are assessed by a limited survey that covers quality, environment and business ethics aspects. For contract rewards to the existing significant suppliers, quality, timely delivery and ESG score determined based on the Supplier Sustainability Index are considered. Based on the methodology explained in detail in the Supplier ESG Program, a minimum 20% of ESG score is weighted in the final score of the supplier to be selected for contract awarding. 173 suppliers have committed to set GHG emission/water/waste/ energy efficiency targets since 2021. We will monitor their progress.

#### Comment

Please see the detailed information about our supplier engagement actions and targets in our Sustainability Report 2022, p. 167-183 at the given link below: https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf

Please see the detailed information about our Supplier ESG Program at the given link below:

https://www.arcelikglobal.com/media/7371/supplier-esg-program.pdf

#### Type of engagement



Engagement & incentivization (changing supplier behavior)

#### **Details of engagement**

Run an engagement campaign to educate suppliers about climate change Provide training, support, and best practices on how to make credible renewable energy usage claims

#### % of suppliers by number

49

#### % total procurement spend (direct and indirect)

83.5

## % of supplier-related Scope 3 emissions as reported in C6.5

#### Rationale for the coverage of your engagement

The unique number of significant suppliers assessed through surveys and audits in 2022 is 237. Based on the results, 58 suppliers have been rated as high-risk and middle-risk with substantial actual/potential negative

impacts. We have agreed to work on corrective action plans with all the high-risk suppliers with substantial actual/ potential negative impacts. In addition, the findings of the previous period were taken into consideration.

As a result, 20 follow-up audits were carried out by third-party auditors and a total of 37% of the nonconformities were improved.

- Working with Suppliers to Improve Non-Conformities: Once non-conformities are determined based on Arçelik's internal evaluation and third-party ethics audits, as indicated in the Supplier Assessment section and Supplier ESG Program in further detail, Arçelik sends corrective action plans to suppliers. Arçelik's dedicated sourcing team and Arçelik's third-party service suppliers work with Arçelik suppliers to specifically improve

non-conformities. This includes both on-site and online collaboration via suppliers. - Supplier Trainings: The online trainings, include consist of online webinars and technical consultancy services, cover information on Arçelik's Global Responsible Purchasing Policy and ESG Program well as Arçelik's ESG targets and business strategy approach. In 2022, we activated the Digital Education Platform with the aim of digitizing our sustainability training programs in 10 different areas including ISOEnvironment and Energy Management Systems, GHG inventory calculation method, conflict minerals, energy and environmental data collection, ROHS regulations, occupational health and safety and risk identification.

- Technical Capacity Improvement Program: Arçelik aims to systematically improve the technical capacity of its suppliers in terms of ESG strategy and risk management. We are aware of the fact that this is a long-term journey. We aim to equip our suppliers with the necessary tools to stay proactive, to embed sustainability into growth strategy and to prepare for upcoming regulations. We have witnessed major regulations coming into force, and our efforts to help suppliers proactively proved the strategy is working.

#### Impact of engagement, including measures of success



Examples of the results of our Supplier Development Program which also provide us to measure the success can be found below:

- Working with Suppliers to Improve Non-Conformities: In 2022, a total of 2,737 findings from the results of survey and audits were identified in 237 significant suppliers, while the number of improved findings is 1,026.

- Supplier Training: In 2022, the total number of training hours has reached to 559 person\*hours only on the platform. In Supplier ESG Program, in the online supplier evaluation software tool, we included a benchmark section available for suppliers to access how their peers are performing as best-case examples. Suppliers can access summary reports of why the suppliers were rated as best performing based on Arçelik's Supplier Sustainability Index.

- Energy Efficiency: According to the study on efficient motors at suppliers, which was started in 2022, 13 million kWh energy gain and 3,000 tons fewer CO2 emissions are targeted in order to replace 1,366 motors with more efficient new motors in 40 suppliers. As part of this project, an annual energy gain of 1 million kWh is targeted.

- Conflict Minerals Management: The 3TG (tin, tantalum, tungsten, and gold) minerals used in the production of electronics and durable home appliances are usually extracted in high-risk conflict zones around the world. At Arçelik, being a member of the Responsible Minerals Initiative (RMI) makes us direct our efforts in concert with the international community to improve mineral sourcing practices and to utilize diverse information on high-risk minerals concerning their smelters or refiners (SORs) as well as their place of origin. Arçelik uses RMI tools to train its suppliers, determine the risk level of SORs worldwide, confirm the SORs' country of origin, and

prepare for other precious materials like cobalt, mica, or copper. As we did in 2021, Arçelik published its Conflict Minerals Due Diligence Report in 2022 and we have shared a conflict mineral reporting template with 462

first-tier suppliers to gather information about their due diligence and SORs. The response rate was 73%, meaning 337 of 462 suppliers filled out the survey.

#### Comment

Please see the detailed information about our supplier engagement actions and targets in our Sustainability Report 2022, p. 167-183 at the given link below: https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf

### C12.1b

## (C12.1b) Give details of your climate-related engagement strategy with your customers.

#### Type of engagement & Details of engagement

Education/information sharing Share information about your products and relevant certification schemes (i.e. Energy STAR)

#### % of customers by number

100



### % of customer - related Scope 3 emissions as reported in C6.5 100

### Please explain the rationale for selecting this group of customers and scope of engagement

We engage and raise our customers' awareness with advertisements, documentaries, and publications related to the energy consumption of products, energy efficiency, and by producing the best energy-efficient products. All of our customers are covered in this engagement. For customer awareness, our product's user manuals include information part on "Things to do to save energy". On our website, and on the product labels, customers can reach the energy consumption information of our products. 100% of Scope 3 emissions that come from the use of sold products during their lifetime were reported in C6.5. Arcelik aims to use sustainable product innovation as leverage to differentiate itself from the competition, reduce its environmental footprint to reach its targets, and create brand awareness, which would enhance brand perception and help increase sales and revenues. As a home appliance manufacturer, Arcelik has the means to create change for good and contribute to the fight against global risks such as the climate crisis and plastic pollution with energy and resource-efficient appliance sales. By putting sustainability at the heart of operations, Arcelik aims to increase the premium brand perception and to increase its brand pricing index and considers it is a company's mission to increase consumer awareness on climate change and the world's other critical issues such as the plastic crisis limiting a prosperous life within planetary boundaries. Arcelik aims to increase revenue from the sale of energy and resource-efficient appliances as well as connected appliances.

#### Impact of engagement, including measures of success

One of the most valuable indicators of increasing customer awareness as a measure of success about the importance of energy-efficient products is the yearly reduction of Arçelik's Scope 3 emissions from the use of sold products. In addition to this, keeping up with such promises results in a significant cost impact on company financials. 49.4% of total revenue has been supplied from energy-efficient products in 2022. Arçelik needs to invest in producing energy-efficient appliances, increasing renewable energy, energy efficiency investments, and green electricity procurement % to keep its GHG reduction targets. This results in high cost up per product and high investments which cannot always be reflected in price increases. We try to raise awareness of our customers on energy efficiency.

### C12.1d

### (C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Arçelik has a close relationship with all relevant ministry departments with joining and leading their climate change projects. E.g. Arçelik was a partner to Market Transformation of Energy Efficient Appliances (EVÜdP) in Turkey. EVÜdP Project started in 2010 and completed by the end of 2015. UNDP, GEF, T.R. Ministry of Industry and Technology, T.R.Ministry of Energy and Natural Resources, and TÜRKBESD are also members of the Project. The aim was to enhance the strategy and infrastructure of market transformation towards more energy-efficient



household appliances thus reducing domestic electricity consumption and decreasing greenhouse gas emissions. As a result of EVÜdP project, EU ecodesign and energy labeling regulations for washing machine, dishwasher, oven, hob, hood, refrigerator, freezer, air conditioners, dryer, and television were implemented in Turkey in 2011 in parallel with EU laws. Under the EU harmonization efforts, non-energy efficient refrigerators, washing machines, and dishwashers are banned in 2011. In this way products are placed on the market as of today are 2 times more efficient compared to 2010. For implementing EU regulations to Turkish legislation; strong coordination between T.R. Industry and Technology Ministry, and the producers has been created. Arcelik also supports national and international activities for combating climate change. Arcelik participates in Global Climate Conferences (COP) and shares its best practices in the panels since 2011. Arcelik attends meetings organized by the Ministry for defining Turkey's climate strategy. One of the Board Members of Arcelik chairs the Turkish Industry & Business Association Investment Environment Roundtable as well as Industry Policies Roundtable. The Quality, Sustainability and Corporate Affairs Director of Arcelik, chairs the Turkish Industry & Business Association Environment and Climate Change Working Group and regularly reports all climate change-related issues including but not limited to the EU Green Deal, Carbon Border Adjustment Mechanism, carbon pricing, carbon credits market, and renewable energy investment. In addition to these, Arcelik is a member of several international trade associations and NGOs and an active participant in climate-related working groups and projects under these organizations. For example, Arcelik is a member of WBCSD, the Turkish Sustainable Development Association (SKD) which is a direct member of WBCSD, and Sustainable Process Industry Through Resource and Energy Efficiency (A.SPIRE). Also, Arcelik is in collaboration with UNEP for U4E project. As an active member of the association, Arcelik closely follows the new EU energy labelling and eco-design legislation through APPLiA that engages with policymakers for the related low carbon economy transition of home appliances, shares comments, opinions with other participants, and takes necessary internal actions to align its products with the 1.5-degree world. In 2022, the CEO of Arcelik has been selected as the President of APPLiA. Arcelik also incorporates climate-related risk and opportunity disclosures in this report in line with the Taskforce on Climate-related Financial Disclosures (TCFD) framework. Being one of the supporters of the Taskforce on Climaterelated Financial Disclosures(TCFD), our targets to reduce GHG emissions were approved by the Science Based Targets initiative (SBTi). We collaborate with International Finance Corporation(IFC) to evaluate the water efficiency of our production plants. In the project, the efficiency of water consumption in each process is evaluated and benchmarked against global players in the industry In line with the project, we set our 2030 target to reduce water withdrawal in the production process by 45% per product compared to the 2015 base year. This target is very critical for Arcelik since water stress is detected as the most important climaterelated risk for Arcelik. We are involved in an H2020 project called CSERVEES which aims to accelerate the transition to a circular economy in the electronics sector. With this project, Arcelik focuses on increasing recycled content in production and try new circular economy business models such as rent and second-hand sale. Arcelik is also a partner of another H2020 project called ECOFACT based on enhanced Life Cycle Assessment (LCA) and Life Cycle Cost Analysis (LCCA) towards resource-efficient manufacturing. The project aims to support manufacturing industries in optimizing energy performance of production processes with regard to restrictions such as time and resources.



### C12.2

# (C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

### C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

### **Climate-related requirement**

Complying with regulatory requirements

### Description of this climate related requirement

Arcelik Global Responsible Purchasing Policy sets out the expectations from suppliers such as compliance with the law, respecting and accepting ethnic and cultural diversities, protecting human rights, fighting against bribery and corruption, establishing mutually beneficial relationships with all business partners, environmental regulations and protection. It is designed to ensure that suppliers' business practices comply with both applicable legal rules and Arcelik values. Accepting and complying with Arcelik Global Responsible Purchasing Policy is a contractual obligation. In case of a serious violation of this Policy in a systematic manner, Arcelik reserves the right to terminate the contract. Working on environmental projects such as LCA, waste heat recovery, wastewater recovery, CDP reporting, etc. We believe that the suppliers we work with should, as a minimum, have established ISO 14001 Environment Management Systems and ISO 50001 Energy Management Systems. The ISO 14001 Environmental Management System provides guidance as to which environmental systems should be established. The ISO 50001 Energy System provides guidance as to which energy efficiency measures must be implemented. Suppliers are encouraged to build on top of these systems to increase their positive impact.

### % suppliers by procurement spend that have to comply with this climaterelated requirement

90

# % suppliers by procurement spend in compliance with this climate-related requirement

83.5

### Mechanisms for monitoring compliance with this climate-related requirement

Certification Second-party verification Off-site third-party verification On-site third-party verification



#### Supplier scorecard or rating

#### Response to supplier non-compliance with this climate-related requirement

Other, please specify

Based on the case, Arcelik sometimes suspends the relationship directly but at times Arcelik retains the relationship but requires improvement regarding the issue of non-compliance

U Arcelik\_Responsible-Purchasing-Policy.pdf

#### **Climate-related requirement**

Climate-related disclosure through a non-public platform

#### Description of this climate related requirement

We developed an in-house Supplier Sustainability Index . The project has been initiated with the direct (Tier 1) material and product suppliers. In 2022, we have continued working on building the same infrastructure with

our logistics suppliers. A dedicated in-house team in the Purchasing and Product Sourcing Departments works on this project in collaboration with the sustainability teams. We have also partnered with an independent accredited audit firm to help us carry out this project. The aim is to understand our suppliers' ESG-related risks and opportunities by collecting and analyzing their data. Our main intention is to enable Scope 3 emissions. reduction in the value chain. Therefore, each year we carry out supplier screening processes considering ESG-related risks and business relevance to determine significant suppliers which will be given priority in the

assessment process. As a first step of the Index, qualitative and quantitative ESG data are collected through a comprehensive online survey prepared in line with GRI Sustainability Reporting Standards, and verification is

provided by the third-party independent accredited audit firm based on evidence of the suppliers. Suppliers that do not fill out the supporting documentation or the data requirements do not get any points. We assess the suppliers based on the data provided to understand their level of maturity in terms of ESG integration into their business based on our internal assessment.

### % suppliers by procurement spend that have to comply with this climaterelated requirement

90

# % suppliers by procurement spend in compliance with this climate-related requirement

30.3

Mechanisms for monitoring compliance with this climate-related requirement Off-site third-party verification

On-site third-party verification Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement



#### Other, please specify

Based on the case, Arcelik sometimes suspends the relationship directly but at times Arcelik retains the relationship but requires improvement regarding the issue of non-compliance

Arcelik\_Responsible-Purchasing-Policy.pdf

### **Climate-related requirement**

Implementation of emissions reduction initiatives

### Description of this climate related requirement

In November 2021, we started to circulate a letter (herein referred to as the "Commitment Letter") to our suppliers explaining our sustainability strategy, our sustainability credentials, and our Science Based Targets as well as the 2030 environmental targets. We have asked our suppliers to sign the Commitment Letter and to commit to setting their own targets for GHG emissions, water consumption, waste reduction, and energy efficiency. We also have a requirement that suppliers will share these targets publicly on their websites and in their sustainability reports and report on progress in the same way we do. To date, 173 suppliers have signed the Commitment Letter. We aim to ensure that, by the end of 2023, the 173 signatories of the Commitment Letter will set long-term GHG emission, water, energy efficiency, and waste reduction targets and publicly share these targets on their websites and sustainability reports. As of 2022, the percentage of suppliers by procurement spent in compliance with this climate-related requirement is 0.22.

### % suppliers by procurement spend that have to comply with this climaterelated requirement

90

# % suppliers by procurement spend in compliance with this climate-related requirement

0.22

Mechanisms for monitoring compliance with this climate-related requirement Supplier self-assessment

### Response to supplier non-compliance with this climate-related requirement

Other, please specify

Based on the case, Arcelik sometimes suspends the relationship directly but at times Arcelik retains the relationship but requires improvement regarding the issue of non-compliance

U Arcelik\_Responsible-Purchasing-Policy.pdf

### C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?



#### Row 1

### External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

# Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

#### Attach commitment or position statement(s)

As Arcelik's Global Sectoral Relations Management & NGO Membership Policy Document states, we are striving to build a sustainable world with our technologies improving the future. In line with our determined objectives, we value and prioritize the UN's Sustainable Development Goals, Paris Agreement, and other related documents. Pursuant to Arcelik's Global Human Rights Policy and Climate Change Strategy, Arcelik works in collaboration with all public bodies, NGOs, trade associations, and other related organizations or institutions in the advancement of the proposed legislation and/or other related regulations which may affect legitimate business interests that are compatible with international human rights norms and Paris Agreement. Furthermore, Arcelik and its affiliates do not and will not support any position conflicting with the international guiding principles and agreements related with human rights and the environment (such as United Nations Guiding Principles on Business and Human Rights, Paris Agreement, and etc). If any evidence is observed on infringement of policies contradicting in alignment with the Paris Agreement or violation of the United Nations Guiding Principles on Business and Human Rights in any membership, the written reservation will be conveyed to the related Body Secretariat. If no satisfactory actions are taken after three consecutive reservations in that particular year, membership will be canceled.

In addition, as Arcelik's Review on Industry Association Memberships document states, Arçelik places sustainability at the heart of its business model and focuses on creating shared value in the long term via establishing targets in line with the UN Sustainable Development Goals. To complement our internal practices, the company is also taking an active role in a plethora of leading platforms including the UN Global Compact, WEF Alliance of CEO Climate Leaders, WBCSD (World Business Council for Sustainable Development) etc. Through these memberships in global organizations, the company actively supports the acceleration of ESG strategies which helps push private organizations as well as policymakers to enhance and accelerate sustainability regulations and incentives to better help transform industries. In our industry, we constantly seek new ways to collaborate with and contribute to mechanisms tackling climate change and moving towards decarbonization beyond legal requirements and voice our firm commitment in the platforms like trade unions, sectoral associations, etc. we continuously engage with. Please refer to our Global Sectoral Relations Management and NGO Membership Policy document. Arçelik and its affiliates do not



and will not support any position conflicting with the international guiding principles and agreements related to human rights and the environment (such as United Nations Guiding Principles on Business and Human Rights, Paris Agreement, and etc). In line with our business model, we have mapped our strategic pillars as Climate Change and Decarbonization, Water Management, Circular Economy, Biodiversity, and Products that Reduce Environmental Footprint.

U global-sectoral-relations-management-and-ngo-membership-policy.pdf

Arçelik Global's Review into its Industry Association Memberships Report\_Rev.docx

# Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Through a defined process, Arcelik ensures its corporate engagements are in line with Arçelik's Climate Change Strategy and Global Code of Conduct which are based on international guiding principles such as Paris Agreement. Quality, Sustainability and Corporate Affairs (QSCA) Executive Director is responsible for the oversight of all communications with related institutions in line with Arçelik's Climate Change Strategy and Global Code of Conduct. The Sectoral Relations Department is responsible for gathering all information. The Department follows developments on a global scale and provides guidance on strategic trends and general Arçelik views.

The Board Member of Arcelik chairs the Turkish Industry&Business Association Investment Environment and Industry Policies Roundtables. The QSCA Director chairs the Turkish Industry & Business Association Environment and Climate Change Working Group and regularly reports all climate change-related issues including but not limited to the EU Green Deal, Carbon Border Adjustment Mechanism, carbon pricing, carbon credits market, and renewable energy investment. Arcelik's CEO is a high commissioner on the Carbon Pricing Leadership Coalition under the auspices of the World Bank. In 2022, Arcelik's CEO was selected as the president of APPLiA (Home Appliance Association in EU) which engages with policymakers about the related issues in the home appliance industry including the impacts of the industry on climate change and impacts of climate change on the industry. In line with the SBT Net Zero 2050 Standard, Arcelik intends to invest in permanent carbon removal solutions to offset the company's residual emissions (blue carbon or a combination of both technology-based solutions & blue carbon projects). In 2021, Arcelik joined Business Ambition for 1.5°C and Race to Zero -Net-zero commitment. Arcelik committed to doubling energy productivity per revenue by

2030 based on the EP100 membership. Arçelik participated in COPs and represented Turkey. Arçelik signed The Principles for Dialogue on Climate Action. Arçelik made commitments to «Paris Pledge for Action» of Cambridge University and the "Responsible corporate engagement policy" of the "Road to Paris 2015 Project". Arçelik shares its comments, opinions, experiences, and revisions for draft environmental legislation including climate-related regulations in the geographies it operates, and joins regulation-making meetings with other pairs.



### C12.3a

# (C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Partnership of Market Readiness (PMR) Turkey Project Phase - PMR Turkey has been pioneering activities on implementation of legislation on monitoring, reporting and verification, and conducting studies on the applicability of carbon pricing instruments in our country since 2013.

#### Category of policy, law, or regulation that may impact the climate Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Carbon taxes Emissions trading schemes

Policy, law, or regulation geographic coverage

National

- Country/area/region the policy, law, or regulation applies to Turkey
- Your organization's position on the policy, law, or regulation

Support with no exceptions

### Description of engagement with policy makers

PMR Turkey has been pioneering activities on the implementation of legislation on monitoring, reporting and verification, and conducting studies on the applicability of carbon pricing instruments in our country since 2013. Under the Partnership of Market Readiness (PMR) Turkey Project Phase I, analytical studies were carried out to support decision-making processes. Some of the analytical studies carried out in the 1st Phase of the Project are as follows;

- Monitoring, Reporting, Pilot Studies on Verification (IRD) System
- Evaluation of Compliance of Greenhouse Gas Emission Trading System in Turkey
- Evaluation of Market-Based Emission Reduction Policy Options in Turkey
- Evaluation of the Effects of Carbon Pricing Policies on the Economy, Budget and Sectors

Assessment of Carbon Leakage Risk for Turkey Under Carbon Pricing Policies

• Synthesis Report- Carbon Pricing Policy Recommendations for Turkey In the 2nd Implementation Phase, the legal and technical infrastructure for pilot ETS was established.

The main outcomes Phase 2 are listed below:

• Establishing the legal and institutional infrastructure on the Climate Change Law and ETS regulations



- · Establishing an upper limit for the emissions and forming allocation plans for Pilot ETS
- Developing an application for ETS simulation
- Developing infrastructure of a registry software program for ETS
- Evaluation of the Paris Agreement- Article 6 with regards to Turkey's Aspect
- Forming A Communication Strategy for

PMR During the project, several stakeholder meetings and feedback rounds were conducted that helped to understand the attitudes, motivations, and values of key target audiences. As a stakeholder in this project, we participated in all meetings and provided all the necessary support in shaping the legislation infrastructure and the systems.

### Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

# Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

### Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

As Arçelik, we already perform lots of GHG emission reduction projects in our production plants in line with our climate transition in Turkey. Having an emission trading system in Turkey can provide us to have an accurate carbon pricing mechanism and policy, be aligned with EU ETS, and be prepared with our suppliers for upcoming climate regulations such as Carbon Border Adjustment Mechanism (CBAM).

# Specify the policy, law, or regulation on which your organization is engaging with policy makers

Regulation on Waste Electrical and Electronic Equipment (WEEE)

Category of policy, law, or regulation that may impact the climate Low-carbon products and services

### Focus area of policy, law, or regulation that may impact the climate Circular economy

Extended Producer Responsibility (EPR)

### Policy, law, or regulation geographic coverage Regional

#### Country/area/region the policy, law, or regulation applies to

South Africa Turkey Europe

### Your organization's position on the policy, law, or regulation Support with no exceptions



### Description of engagement with policy makers

As an electrical and electronic product manufacturer, it is very important for us to manage the end-of-life treatment of our products in the scope of our Extended Producer Responsibility (EPR). Due to that reason, Arçelik has always been a partner of waste electrical and electronic equipment (WEEE) regulations during the feedback and discussion periods and gives its contribution.

We participate and give comments at the preliminary legislative phase of WEEE through the membership in APPLiA (Home Appliance Europe) and Digitaleurope for EU Directive. In addition to that, we were one of the main contributors during the preparation period of WEEE regulations, their revisions, and meeting with policymakers in Turkey and South Africa via our memberships in TÜRKBESD (Turkish White Goods Manufacturers Association), ERA (E-waste Recycling Authority), and SADA (South African Domestic Appliances Association). We submitted our feedback to have a more concrete and efficient WEEE management system in these countries from our industry perspective by prioritizing environmental consequences.

### Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

# Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

# Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Arçelik committed to being a net-zero company in 2050 aligning with Science Based Target's Net-Zero Standard. It means that Arçelik will reduce its total Scope 1&2&3 emissions by at least 90% compared to the base year. Having effective WEEE management regulations in the countries where we are located as producers can provide not only reduce GHG emissions at the end-of-life stage but also increase the availability of recycled materials to reduce the carbon footprint of materials used in the products (from the category of purchased goods and services). So, it is very important for us to have the proper collection of e-wastes and recycle them in terms of achieving our climate transition plans.

### C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

### **Trade association**

Other, please specify Home Appliance Europe (APPLiA)



# Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

### Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

APPLiA is a Brussels-based trade association that provides a single, consensual voice for the home appliance industry in Europe, promoting industry's mission to advance lifestyles. APPLiA's main interest areas are sustainability, energy efficiency, green and digital transition, packaging, competitiveness and etc. There are several working groups where specific topics are discussed and a general view of the sector is formulated. Arcelik's CEO is currently the president of APPLiA and the technical teams of Arcelik actively attend to working group meetings. This allows Arcelik to adapt to legislative changes more quickly as well as comply with relevant changes in the market. APPLiA has national associations throughout Europe, and Arcelik and its subsidiaries are members to these associations as well. (e.g. TÜRKBESD-Türkiye, APPLiA Romania, APPLiA Spain, APPLiA Italy, APPLiA Polska, APPLiA Ireland, APPLiA Sweden, APPLiA Slovakia, Elektroniikan Tukkukauppiaat (ETK)-Finland, Fachverband der Elektro- und Elektronikindustrie (FEEI)-Austria). In terms of climate change, APPLiA engages with policymakers for the related low-carbon economy transition of home appliances. Climate-related regulations, which are discussed in working groups in APPLiA, including energy and material efficiency, Extended Producer Responsibility (EPR), and transition to a circular economy are the regulations that aim to reduce the carbon footprint of the product throughout the life cycle.

Since APPLiA already prioritizes EU's decarbonization road map and Green Deal initiatives, we promoted their current position.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

4,062,901

### Describe the aim of your organization's funding

Annual membership fee

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

Other, please specify Turkish Industries & Business Association (TUSIAD)



# Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

### Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

With strong representative power in terms of the added value created by member organizations in our country's economy, TÜSİAD is also a member of Business Europe, which is considered to represent the European private sector. As an umbrella NGO representing our country's business world, TÜSİAD is an institution that actively participates in forming opinions as a public authority on a wide range of topics from sectoral developments to other related areas. In addition, TÜSİAD can closely monitor legislative works in the EU that concern our sector, and form opinions at the level of EU institutions by means of the Business Europe channel of which it is a member. We actively participate in and contribute to many TÜSAİD working groups and task forces. In particular, Arçelik leads the Working Group for the Environment and Climate Change and the

EU Green Deal Task Force to actively work on the formation of country policies in these areas.

We influenced their position to support that Turkish climate law should adopt as soon as possible and Turkiye should implement the emission trading system (ETS) in line with EU ETS.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

420,204

### Describe the aim of your organization's funding

Annual membership fee

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

Other, please specify

The Association of Manufacturers of Domestic Appliances (AMDEA)

### Is your organization's position on climate change policy consistent with theirs?

Consistent



# Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Beko PLC which is a subsidiary of Arçelik is a member of AMDEA for more than 15 years and the Managing Director of Beko PLC act as the Chair of the Association. AMDEA represents 80% of the appliance industry in the UK covering the manufacturers of small and large domestic appliances. AMDEA has two main committees namely, technical and consumer groups that are supported by issue-specific panels. The main issues are, circular

economy, environment, sustainability targets, WEEE, and cyber security.

### Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

2,252,830

### Describe the aim of your organization's funding

Annual membership fee

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement? Yes, we have evaluated, and it is aligned

### C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

**Publication** 

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

### Attach the document

U Arcelik\_Annual Report\_2022.pdf

### **Page/Section reference**

- SECTION 4: ARÇELİK AND SUSTAINABILITY - Pages 160-183

- TCFD Reporting and Other ESG Related Risks and Opportunities Table - Pages 378-389



### **Content elements**

Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics Other, please specify TCFD aligned reporting

### Comment

We shared information about Arçelik's response to climate change and GHG emissions performance for this reporting year in our Annual Report 2022.

**Publication** 

In voluntary sustainability report

#### Status

Complete

#### Attach the document

Arcelik\_Sustainability Report\_2022.pdf

#### **Page/Section reference**

- CLIMATE CHANGE AND DECARBONIZATION Pages: 41-51
- PRODUCT STEWARDSHIP Pages: 63 80
- ANNEX 4: ENVIRONMENTAL PERFORMANCE INDICATORS- Pages: 197 202
- ANNEX 11.1: TCFD Pages: 230-241
- ANNEX 13: EU TAXONOMY REPORT Pages: 253-257

#### **Content elements**

Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics Other, please specify TCFD aligned reporting

#### Comment

We shared information about Arçelik's response to climate change and GHG emissions performance for this reporting year in our Sustainability Report 2022.



### C12.5

# (C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C RE100 Race to Zero Campaign Task Force on Climate- related Financial Disclosures (TCFD) UN Global Compact We Mean Business World Business Council for Sustainable Development (WBCSD) Other, please specify Stakeholder Capitalism Metrics (SCM), EP100, WEF	We are committed to being a Net-Zero company by 2050 and officially joined the Business Ambition for 1.5°C, Race to Zero Campaign in September 2021. Arçelik has approved Science Based Targets in line with the Paris Agreement's scenario of keeping the global temperature rise "well below 2 °C". Accordingly, our targets are to reduce Scope 1 and Scope 2 GHG emissions by 30%, and Scope 3 GHG emissions from the use of sold products by 15% by 2030, compared to the base year of 2018. Arçelik has also committed to set a Net Zero 2050 target aligned with the SBTi Net-Zero Standard in March 2022 and needs to set a new near term and long term SBTi target aligned with a 1.5 degree scenario until March 2024. The base year of the new target will be 2022 and the new target will be much more challenging, including all group companies and joint ventures as well as all major domestic appliance product groups. One of our top priorities is concentrating our efforts on combating the climate crisis and incorporating climate-related risk disclosures into our corporate reporting, as well as enterprise risk management systems. As a supporter of the Task Force on Climate-related Financial Disclosures (TCFD), our ambition is to further develop our business towards achieving a low carbon future and ensuring our business is resilient and adaptable for climate-related risks and opportunities. By supporting TCFD, we aim to strengthen the link between climate change and the resulting financial impacts on our business. We have been a signatory of TCFD since 2020 and disclose information about the risks and opportunities of climate change. We strongly support the UNGC and incorporate its Ten Principles into all our business operations. We annually disclose and report our progress following how we applied these Principles. We are proudly part of the UN Global Compact's CFO Taskforce, which brings



concepts and frameworks. We are one of the endorsing compan of the CEO Water Mandate, a platform for business leaders and	ies
of the CEO Water Mandate, a platform for business leaders and	
·	
learners to make commitments and enhance water stewardship.	As
part of our commitments, we established a new partnership with	
Water.org to support a community program that will empower	
10,000 Kenyans in need with access to safe water and sanitation	n
solutions.	
We have signed the urgency statement of the We Mean Busines	s
Coalition to show our commitment to limiting	
global warming to 1.5°C and avoiding dangerous tipping points.	
Arçelik's long-term strategy and approach to sustainability issues	5
aligned with the WBCSD's membership requirements and Visior	ı 👘
2050: Time for Transformation, which aims to build a future whe	re
more than nine billion people can live well within planetary	
boundaries. At Arçelik, we support the WBCSD Manifesto, which	า
sets out twelve action	
priorities framed around reducing, removing, and reporting	
emissions and emphasizes the need for public-private collaboration	tion
to drive climate action. In 2022, we were involved in two working	
groups under WBCSD that helped us accelerate our transition to	)
climate action. The SOS 1.5 Initiative offers an industry-specific	
roadmap to achieve 1.5°C targets. The CFO Network	
initiative enables the acceleration of financial transformation in the	ne
areas of impact standardization, investor engagement, leadershi	р
and integration.	
Also this year, our CEO, Hakan Bulgurlu was announced as the	
New Executive Committee (ExCo) member in 2023 for WBCSD.	
Additionally, Arcelik joined WBCSD's Reporting Matters program	
2020 to evaluate the compatibility of its sustainability report with	
international reporting standards. In the scope of this program,	
Arçelik's 2021 Sustainability Report was evaluated and this 2022	2
report was prepared in light of thefeedback received.	
Koç Holding is a signatory to the Stakeholder Capitalism Metrics	i
(SCM) by WEF International Business Council, and as a Koç Gr	
company, Arçelik reports its performance in line with SCM.	P
EP100, bringing together more than 100 energy-smart companie	s
dedicated to using energy more efficiently, is managed by the	
Climate Group in partnership with the World Green Building Cou	ncil
Through this membership, we are committed to increasing energy	
efficiency by doubling our global economic output for each unit of	
energy consumed from 2010 to 2030 and we plan to implement	
50001 Energy	100
Management Systems in all our manufacturing plants by 2025.	in
In 2022, as a signatory of EP100, Arçelik published its progress	
the related targets for the first time and was included with its bes	st
practice in smart energy management in the Climate Group	



	Progress and Insights Report.
	Arçelik became one of the signatories of WEF open letter that
	addresses world leaders to accelerate net-zero transition. We work
	with our stakeholders to encourage all to participate in this alterity.

### C15. Biodiversity

### C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Two members of Arçelik's Board of Directors (BoD), President of the Consumer Durables Group at Koç Holding and CEO of Arçelik, have responsibilities for biodiversity-related issues. President of the Consumer Durables has been appointed based on a BoD Decision to inform the BoD on sustainability-related issues, commitments, targets, and progress including biodiversity studies in the company. Arçelik's Sustainability Council chaired by CFO gathers quarterly with the releant top management executives, who is responsible for management of risks and opportunities of nature-related impacts and dependencies.

### C15.2

# (C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species	SDG Other, please specify UICN Guideline



Other, please specify	
Implementing actions to reduce pressures and support the natural development of habitats	

### C15.3

# (C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

### Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment  $$_{\mbox{Yes}}$$ 

### Value chain stage(s) covered

**Direct operations** 

### Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool IBAT – Integrated Biodiversity Assessment Tool SBTN materiality tool TNFD – Taskforce on Nature-related Financial Disclosures

# Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

The first step of the assessment includes mapping our business footprint of our own operations to implement location-based approach. The geo-mapping of our manufacturing facilities has been carried out using the Integrated Biodiversity Assessment Tool (IBAT).

The potentially material impacts of our industry have been defined through SBTN's Materiality Screening Tool which is based on ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure). According to the result, the pressure areas required to assessed are water use, GHG emissions, water pollutants and soil pollutants, which are categorized under resource use, climate change, pollution. In addition, a proximity to high biodiversity of our direct operations is another crucial factor we take into consideration from both nature-related impacts and dependency aspects. We prioritized our manufacturing facility, in Romania as Arcelik has a factory that is adjacent to biodiversity-sensitive area, Natura 2000, which is known as Birds Directive Special Protection Area. In the region, we are already required to measure PM10, NO2, and SO2 quarterly under the National Air Quality Act 104/2011. Arcelik has committed to go beyond by setting its roadmap with EPC Consultanță de Mediu, an environmental consulting company specializing in biodiversity conservation. The impact on nature has been found limited. However, some certain strategies have been defined to create improvement for the biodiversity value of the land under our responsibility in line IUCN Guidelines.

Arçelik applies Mitigation Hierarchy through preventing, minimizing, and mitigating factors that threaten biodiversity periodically. The pressure on biodiversity stemming from climate change, resource usage, pollution is aimed to be reduced by Arçelik's long-



term targets based on water, energy, SBTi-aligned GHG emissions targets. Arçelik aims to work to improve biodiversity footprint towards No Net Loss as of 2050 especially in selected priority areas such as areas in close proximity to key biodiversity protected areas. Such actions will include calculating the biodiversity footprint of the area, designing projects that will help increase biodiversity of endangered or vulnerable species classified by IUCN Red List or national declarations and measure the improvements against the initial footprint. With this focus on biodiversity protection, we will cooperate with third parties specialized in biodiversity protection if necessary.

#### **Dependencies on biodiversity**

Indicate whether your organization undertakes this type of assessment  $$_{\mbox{Yes}}$$ 

Value chain stage(s) covered

**Direct operations** 

#### Tools and methods to assess impacts and/or dependencies on biodiversity ENCORE tool

SBTN materiality tool TNFD – Taskforce on Nature-related Financial Disclosures

### Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

After completing the geo-mapping with IBAT and determining the pressures to be assessed on the SBTN's tool, dependencies of Arcelik has been further assessed. According to the result, the pressure areas required to assessed are water use, GHG emissions, water pollutants and soil pollutants, which are categorized under resource use, climate change, pollution. In addition, a proximity to high biodiversity of our direct operations is another crucial factor we take into consideration from both nature-related impacts and dependency aspects. Arcelik's nature-related dependency is relatively lower, but it has a dependency for its business to continue without disruptions. As a TCFD supporter company, Arcelik reports in line with the recommendations. Based on the outcomes of the S&P Trucost Climate Change Physical Risk Analysis, Arcelik and its suppliers are exposed to a moderate level of physical risk with greatest exposure to water stress, heat wave and cold wave. We also use the World Resources Institute's (WRI) Aqueduct Water Risk Atlas to assess water risks at our worldwide locations, and analysis results are evaluated annually. Upon this, three scenarios have been analyzed in 2022 based on optimistic, moderate and pessimistic by 2030. The locations are found at high water stress risk change at each scenario. However, certain locations such as Pakistan and India are at serious risk in all scenarios. As a risk adaptation plan, we have also set our 2030 target to increase the water recycling and reuse ratio to 70% in all manufacturing plants (excluding JVs) aiming to achieve a closed-loop water system in production. Additionally, we aim to reduce water withdrawal per product by 45% in all manufacturing plants (excluding JVs) by 2030 compared to 2015.



### C15.4

### (C15.4) Does your organization have activities located in or near to biodiversitysensitive areas in the reporting year?

Yes

### C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

#### Classification of biodiversity -sensitive area

Natura 2000 network of protected areas

#### Country/area

Romania

#### Name of the biodiversity-sensitive area

Arctic Factory in Ulmi, adjacent to Natura 2000 which is known as Birds Directive Special Protection Area (SPA)

#### Proximity

Adjacent

# Briefly describe your organization's activities in the reporting year located in or near to the selected area

Arctic Factory in Ulmi to Natura 2000 which is known as Birds Directive Special Protection Area (SPA), where we have a border area of 431,369 m2 is the only manufacturing field where we have a border with protected areas and Important Biodiversity Areas. In the region, we are already required to measure PM10, NO2, and SO2 quarterly under the National Air Quality Act 104/2011. We have the ambition to improve the biodiversity on the site of Ulmi factory by implementing actions to reduce pressures and support the natural development of habitats by 2027.

Arçelik has built a partnership with EPC Consultanță de Mediu, an environmental consulting company based in Romania. Within this scope, the habitat conditions will be improved in accordance with IUCN Guideline.

### Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

#### Mitigation measures implemented within the selected area

Site selection Project design Scheduling Physical controls



# Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

During the stages of the study, the main topics were defining state and benefit indicators in relation to the goals, pressure and response indicators against objectives and strategies, and developing of a biodiversity strategic plan.

Vision: We will improve the biodiversity on the site of Ulmi factory by implementing actions to reduce pressures and support the natural development of habitats. Objective 1: Reduction of existing pressures with key strategies: Significant reduction of grazing by domestic animals & Reducing the risk of wildlife mortality on the entire factory site.

Objective 2: Improvement of habitat conditions for bird species with key strategies: Creating a mosaic of habitats necessary for assuring the optimal conditions for feeding, nesting and reproduction of birds & Creating birds' artificial structures for resting and nesting.

Objective 3: Improvement of habitat conditions for other fauna species with key strategies: Ensuring favourable habitats conditions for increasing the diversity and density of invertebrates, amphibians, reptiles and mammals.

In 2022, a legal permission process has been initiated to inform local public authorities regarding our project.

### C15.5

# (C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?		
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Law & policy Other, please specify In 2022, a legal permission process has been initiated to inform local public authorities regarding our project.	

### C15.6

### (C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

		Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
1	Row 1	Yes, we use indicators	State and benefit indicators
			Pressure indicators Response indicators



### C15.7

# (C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communicatio ns	Content of biodiversity- related policies or commitmen ts Biodiversity strategy	Page 61-62: https://www.arcelikglobal.com/media/7381/arcelik_22_sustainability_re port.pdf
In voluntary sustainability report or other voluntary communicatio ns	Content of biodiversity- related policies or commitmen ts Impacts on biodiversity Details on biodiversity indicators Risks and opportunitie s Biodiversity strategy	All page: https://www.arcelikglobal.com/en/sustainability/intouch/areas/commitm ents-on-biodiversity-no-deforestration/
Other, please specify Biodiversity and No Deforestatio n Policy	Content of biodiversity- related policies or commitmen ts Governanc e Biodiversity strategy	Page 1-2: https://www.arcelikglobal.com/media/7372/biodiversity-no- deforestration-policy.pdf



### C16. Signoff

### C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Please see Arçelik's TCFD reporting at the given link below:

Annual Report 2022: https://www.arcelikglobal.com/media/7311/\_arcelik-2022eng.pdf (p.378-389)

Sustainability Report 2022: https://www.arcelikglobal.com/media/7381/arcelik\_22\_sustainability\_report.pdf (p.230-241)

### C16.1

# (C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

Job title		Corresponding job category	
Row 1	Chief Financial Officer (CFO)	Chief Financial Officer (CFO)	

### Submit your response

### In which language are you submitting your response?

English

### Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

### Please confirm below

I have read and accept the applicable Terms