



THE PUMA FOREVER BETTER  
*SUSTAINABILITY HANDBOOKS*  
ENVIRONMENTAL STANDARDS



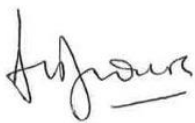
## **FOREWORD**

At PUMA, we believe that our position as a creative leader in the Sports industry gives us the opportunity and the responsibility to contribute to a better world for generations to come. Sustainability remains a key value of the PUMA brand. We are working towards a more just and sustainable future, accelerating positive change in the industry and the world. We believe that by staying true to our values, inspiring the passion and talent of our people, working in sustainable, innovative ways and doing our best to be Fair, Honest, Positive, and Creative, we will keep on making the products our customers love and at the same time bring our vision of a better world a little closer every day.

We aim to bring our trading practices in line with the principles of sustainable development. This means that we do not just want to provide high-quality products, but it is our duty to ensure that these products are manufactured in workplaces where human rights are respected and workers' health and safety as well as the environment are protected.

PUMA takes on responsibility for everybody involved in the production process, whether they are PUMA employees or not. However, this responsibility can neither replace nor substitute the responsibility of our Vendors within their own manufacturing facilities. Our "Code of Conduct" expresses the expectations we have of our Vendors. It is integrated into our manufacturing agreement, which delimits the business relationship we share with our partners. PUMA takes this shared responsibility seriously. We reserve the right to terminate business relations with any partner who does not respect the letter or the spirit of our Code of Conduct or Corporate Sustainability Policies.

Only by partnering up with our Vendors we will be able to have a positive impact and contribute to making a better world for the communities we operate in, the workers who make our great products, our customers and our own employees and, of course, for future generations.



**Anne-Laure Descours**

Chief Sourcing Officer

**~~FOLLOW~~**  
**MASTER**  
**THE RULES**

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## **Introduction**

### **FOREVER BETTER Sustainability Handbooks**

The PUMA Code of Conduct defines a clear minimum standard for supply chain partners. Our Code of Conduct is displayed in all our directly contracted partner factories and is also an essential part of purchasing contracts.

The Code's standards are based on International Labor Organization standards and other internationally accepted standards.

PUMA requires all vendors, their subcontractors and their suppliers to comply in full with this Code of Conduct. All PUMA Vendors must have met all minimum legal requirements. In addition, each must comply with PUMA standards (which may exceed legal requirements) as defined in the four (4) PUMA Forever Better Sustainability Handbooks: (the "Handbooks"):

- "Social Standards" elaborates upon PUMA's position on labor rights
- Guidelines for sustainability and environmental protection are contained in "Environmental Standards"
- "Occupational Health & Safety" outlines our standards for and health and safety throughout our supply chain
- Guidelines for Chemicals, Materials and Restricted Substances are in "Chemical Management"

These Handbooks are subject to continuous updates. Any feedback or suggestions for improvement are welcome (contact your PUMA Sustainability Team representative or email [sustain@puma.com](mailto:sustain@puma.com)).

PUMA is committed to ethical and responsible corporate behavior, as prescribed in our Code of Ethics, which our employees and business partners have pledged to uphold.

***Legal Disclaimer:***

*The content of this handbook is not intended to replace local or national regulations, nor will following the guidelines in the Handbooks guarantee compliance with them. At all times, it remains the sole responsibility of our own entities, Vendors and their Subcontractors, to ensure compliance with all applicable local and national regulations, including those labor, worker health and safety, and environmental and product safety.*

## **Sec. 1 – PUMA Sustainability Approach**

### 1.1 Strategic approach

#### SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs) define global development priorities for 2030 and aim to join efforts among businesses, governments and civil society around a defined set of targets. The PUMA 10FOR25 Sustainability Targets are linked to the SDGs.

#### UN GUIDING PRINCIPLES

The UN Guiding Principles on Business and Human Rights are a set of guidelines for states and companies to prevent, address and remedy human rights abuses. Human Rights are featured with an own target section in PUMA's 10FOR25 strategy.

#### POSITIVE IMPACT

Our PUMA sustainability strategy is centered around creating maximum positive impact. This means integrating sustainability into our main business and volume styles.

#### PARTNERSHIP WITH VENDORS

The majority of our environmental and social impact is created in our supply chain. Therefore, we are working in partnership with our vendors to achieve our common goals - from ensuring fair working conditions and effective pollution controls to the development and use of more sustainable materials.

#### STAKEHOLDER DIALOGUE

Striving for a more sustainable world puts us all on the same team. To do our part and become an ever more sustainable company, we depend on what our stakeholders and industry peers share with PUMA. The feedback and expertise of our stakeholders, as well as the collaborations with our industry peers is indispensable for our progress.

In an industry where many suppliers are shared among brands, we cannot do it alone. Therefore, we are working with our industry peers towards harmonizing sustainability standards and joint efforts towards implementing good practices to create positive impact.



## 1.2 Track Record

### JUDGING THE SCORE

Our sustainability department is in constant exchange with PUMA's Managing Directors and top management on sustainability topics. Through executive reports as well as in-person meetings, PUMA aims to keep all internal stakeholders informed to be able to react quickly. In turn, we receive frequent feedback from them as well as external stakeholders.

The Board of Management reports to PUMA's shareholders via the Supervisory Board as well as our Annual Report, which contains a detailed sustainability section.

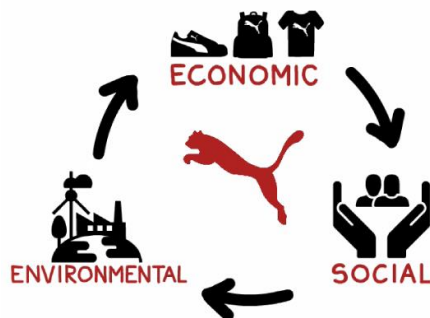
### SUSTAINABILITY TEAM MANAGERS

In terms of sustainability, the highest governance body at PUMA is the Executive Sustainability Committee at SE level. This group of Managers is responsible for the supervision and setting-up of our sustainability strategy. In regular meetings, the members oversee the progress of PUMA against our sustainability targets.

## 1.3 Sustainability Strategy

PUMA has updated its global sustainability strategy that balances three (3) dimensions—**Economic, Social, and Environment** (see Fig. 1)—to achieve sustainable business development. The new strategy includes a drive to mainstream sustainability, create impact and ensure industry alignment.

*Figure 1: Three dimensions of PUMA's Sustainability Strategy*












## 1.4 Sustainability Targets



\*SDG: United Nations Sustainable Development Goals

Figure 2: PUMA 10FOR25 Sustainability Targets

Target	Definition	Target for 2025
 01 <b>Human Rights</b>	Embedding human rights and compliance to ILO Core Conventions in all our operations and suppliers. Making a positive impact on communities where PUMA is present.	1. 100.000 direct and indirect staff trained on women empowerment 2. 150.000 hours of community engagement (in total) 3. Mapping of subcontractors and major T2 suppliers for human rights risks based on geography
 02 <b>Health and Safety</b>	Reducing injury rates significantly to achieve zero fatal accidents and injury rates below industry average.	1. Zero fatal accidents within PUMA and suppliers 2. Reduce injury rates for PUMA Core Suppliers below 0.5 (per 100 full time employees) 3. Reduce injury rates for PUMAs own staff below 0.5 (per 100 full time employees) 4. Ensure functioning OHS committees are in place at all PUMA entities over 100 staff and all suppliers globally

Target	Definition	Target for 2025
 03 <b>Chemicals</b>	Achieving Zero discharge of all hazardous chemicals from our supply chain.	<ol style="list-style-type: none"> <li>1. Ensure 100% of PUMA products are safe</li> <li>2. Maintain RSL compliance rate above 90%</li> <li>3. Reduce organic solvent usage in core footwear manufacturing under 10gr/pair</li> </ol>
 04 <b>Water and Air</b>	Meeting industry good practice on wastewater quality and air emissions to 90% for PUMA core suppliers.	<ol style="list-style-type: none"> <li>1. Ensure 90% of PUMA Core Suppliers with wet processing comply to ZDHC wastewater guideline foundational level</li> <li>2. Ensure 90% of PUMA Core Suppliers comply the ZDHC Air Quality Guideline (in development)</li> <li>3. Reduce water consumption at PUMA core suppliers by additional 15% (on 2020 baseline)</li> </ol>
 05 <b>Climate</b>	Taking a leading role in Climate Action within our industry and implementing our existing science-based greenhouse gas emission reduction target.	<ol style="list-style-type: none"> <li>1. Align PUMA Climate Target to 1.5 Degree Pathway</li> <li>2. Move all PUMA entities to renewable electricity</li> <li>3. Increase percentage of renewable energy used by core suppliers to 25%</li> </ol>
 06 <b>Plastics and the Oceans</b>	Joining forces on reducing plastic pollution.	<ol style="list-style-type: none"> <li>1. Support initiative and scientific research on microfibers (use phase + production); work with core suppliers to reduce microfiber release</li> <li>2. Eliminate plastic bags from PUMA Stores, review hangers and fixtures</li> <li>3. Research biodegradable polyester options for products</li> </ol>
 07 <b>Circularity</b>	Moving toward a more circular business model.	<ol style="list-style-type: none"> <li>1. Build, setup or join product takeback schemes in major markets</li> <li>2. Reduce production waste to landfill by 50%</li> <li>3. Develop recycled material options for leather, rubber, cotton and PU</li> </ol>




Target	Definition	Target for 2025
 08 <b>Products</b>	Ensuring 90% of our products contain more sustainable materials and components.	<ol style="list-style-type: none"> <li>90% of all PUMA Apparel and Accessories contain &gt;50% more sustainable materials</li> <li>90% of all Footwear contain at least one more sustainable component</li> <li>Increase recycled polyester use (apparel and accessories) to 75%</li> </ol>
 09 <b>Fair Income</b>	Mapping and improving wage practices in major sourcing countries.	<ol style="list-style-type: none"> <li>Carry out Fair Wage Assessments including mapping of specific wage ladder for top 5 sourcing countries to help improve their wage levels and practices</li> <li>Ensure bank transfer payment (to workers) for all core suppliers by 2022</li> <li>Ensure effective and freely elected worker representation in all core T1 suppliers through collaboration with other brands</li> </ol>
 10 <b>Biodiversity</b>	Promoting biodiversity by using certified and traceable materials.	<ol style="list-style-type: none"> <li>100% of cotton leather and viscose from certified sources</li> <li>Support setting up a Science Based Target on Biodiversity</li> <li>Zero use of exotic skins or hides</li> </ol>

Figure 3: PUMA Action Plans on 10FOR25 Sustainability Targets

## Sec. 2 – Compliance

### 2.1 Vendor Requirements

PUMA pursues and maintains contractual relationships only with those **factories** and **Licensees** that have agreed to comply with the guidelines and directives set out in the PUMA Forever Better Sustainability Handbooks. All PUMA **factories** are contractually bound to start and pursue business relationships only with **Subcontractors** that are also in compliance with the Handbook

### 2.2 Conflicting Requirements & Conflicts of Interest

Vendor compliance programs must guarantee compliance with all relevant local, national, and international legislation. In case of conflicting requirements, stricter regulation prevails.

Factories shall always make company decisions objectively, and free of any bias that could result in a conflict of interest. Examples of potential biases include:

- Business dealings (e.g., having relationships or investment with competitors)
- Social ties (e.g., friends or relatives influencing decisions)
- Other personal considerations (e.g., offering or accepting bribes; receiving gifts from suppliers, Subcontractors etc.)

### 2.3 Limitations Regarding Antitrust

PUMA will not willingly violate any antitrust legislation by sharing commercial information or other information considered a violation by government authorities. However, we acknowledge that when Vendor compliance programs converge with other business-related activities (e.g., when suppliers engage in production planning) the compliance-related data may imply some commercial information.

Thus, **suppliers** are responsible for maintaining the confidentiality of commercial information, and must inform all relevant customers, including PUMA, of what information the supplier shares with which parties.

### 2.4 Anti-Corruption

Around the world, corruption remains a considerable obstacle to sustainable economic and social development. It threatens the reputations of companies as well as those in their supply chains. Furthermore, new, and stringent anti-corruption regulations continue to emerge worldwide. As a signatory of UN Global Compact, PUMA is committed to upholding the ten (10) Global Compact principles in our operations and supply chain. This commitment includes fighting corruption. As part of this commitment, PUMA has added “Ethical Business Practices” to the PUMA Code of Conduct (see Appendix A). PUMA believes:

corruption impedes business growth, escalates costs and poses serious legal and reputational risks. It also raises transaction costs, undermines fair competition, and distorts sustainable development priorities. **For factories**, corruption can also negatively impact value. It also poses financial, operational, and reputational risks, both for factories and their stakeholders.

As part of PUMA’s supply chain, **factories** must implement robust anti-corruption measures and practices to protect against such risks for all potentially impacted parties as follows:

- Conduct regular training to raise awareness of anti-corruption within their organizations
- Conduct an Anti-Bribery and Corruption Risk Assessment
- Develop an anti-corruption policy and program
- Implement a whistleblowing mechanism

## **Sec. 3 – Factory Monitoring Program**

PUMA’s environmental monitoring program applies, in principle, to all factories producing PUMA products (semi-finished or finished) or manufacturing materials, components, raw materials, trims, labels or packaging.

Currently we implement a compulsory and annual factory monitoring program for core T1 (product manufacturers) and core T2 (fabric/material/label, packaging, trim manufacturers covering 80% of PUMA’s sourcing business volume), we aim to expand this program to non-core T1 and T2.

PUMA Sustainability Team follow-up and monitor factories’ performance. Factories' performance is shared with PUMA Sourcing Teams through regular meetings (e.g., bi-weekly and quarterly) and with PUMA T1 & T2 suppliers (e.g., suppliers’ meeting, capacity building training sessions, emails communications), via reports and/or supplier score card with the aim to incentivize suppliers with good performance or review business plan for suppliers with weak performance.

### **Vendor Due Diligence**

Vendors are expected to conduct due diligence on Human Rights & Labor, Environmental and Integrity risks (Listed in table) as per the recommendations of the [OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector | en | OECD](#) and the UN Guiding Principles and other relevant Responsible Business Conduct standards.

<b>Human Rights &amp; Labor Risks</b>	<b>Environmental Risks</b>	<b>Integrity Risks</b>
<b>Child labor</b>	Hazardous chemicals	<b>Bribery and corruption</b>
<b>Discrimination</b>	Water consumption	
<b>Forced labor</b>	Water pollution	
<b>Occupational health and safety (e.g., worker related injury and ill health)</b>	Greenhouse Gas (GHG) emissions	
<b>Violations of the right of workers to establish or join a trade union and to bargain collectively</b>		
<b>Non-compliance with minimum wage laws</b>		
<b>Wages do not meet basic needs of workers and their families</b>		

Due diligence is an ongoing process, in which Vendors can identify, mitigate, prevent and account for how they address their existing and potential adverse impacts (e.g., child labor, discrimination, hazardous chemicals etc.). An enterprise is expected to conduct due diligence on its own activities and on its suppliers across its supply chain and other business relationships. An enterprise shall embed responsible business conduct in own policy and management systems, identify actual and potential harms in the enterprise’s own operations and Its supply chain. Cease, prevent or mitigate harm in own operation and its supply chain, keep tracking and communicating with relevant stakeholders, provide for or cooperate in remediation when appropriate.

In response to the COVID-19 pandemic and the possibility of future crises, vendors are recommended to conduct their due diligence checks virtually when necessary.

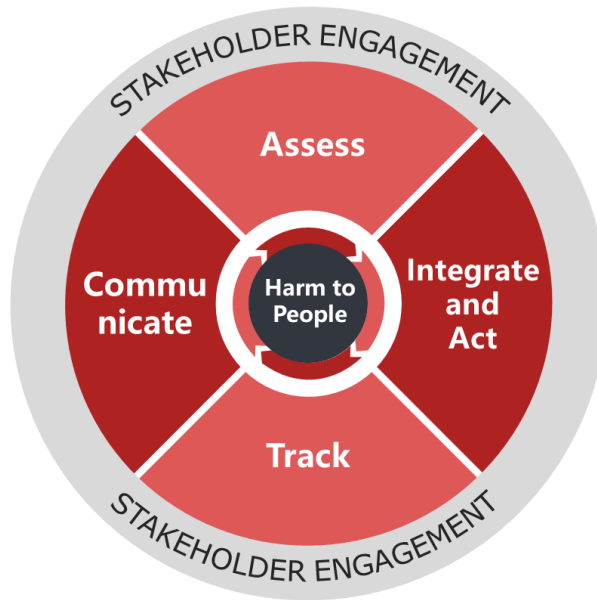


Figure 4: Vendor Due Diligence Process

### 3.1 PUMA Declaration of Principles

**All suppliers** must sign the PUMA Declaration of Principles, declaring their intention and conviction to comply with all relevant national and local laws, as well as with the policies set forth in the PUMA Forever Better Sustainability Handbooks. The Declaration also affirms the suppliers' commitment to only choose subcontractors for the manufacturing of PUMA products that comply with the Handbooks.

PUMA reserves the right to conduct  
Compliance Audits without advance notice.

PUMA may visit **core factories** more frequently. However, not all assessments will be in the form of audits. For example, core suppliers may be visited to validate social and environmental KPIs.

#### **AUDIT SCORE SUMMARY**

- Only factories with a passing grade of **A**, **B+** or **B-** will be authorized for PUMA production.
- Existing factories that receive a **C** rating will be given a specific timeframe (6 months) to resolve noncompliance Critical Issues. Based on successful completion, the factory will be upgraded to a **B** rating and production authorization will be given.
- Factories given a **D** rating are considered unprepared for compliance with the PUMA Standards. If this concerns an initial audit of **a potential new factory**, the business relationship will not be started. For an assessment of **an existing factory**, a phase-out plan could be considered, leading to the eventual termination of the business relationship, i.e., deactivation.

## 3.2 New Factory Application

### *Pre-Screening Visits*

Before a PUMA audit is conducted at a factory seeking PUMA supplier accreditation, sourcing partners usually conduct a pre-screening to get an overview of the factory's compliance status. Based on an initial visit and investigation at the factory, the sourcing partner may fill out an initial compliance report that can be used to prepare the full audit

### *Factory Self-Assessments*

In addition, before a Compliance Audit is scheduled, each factory will be asked to complete a self-assessment questionnaire. This self-assessment questionnaire is similar in scope to the PUMA Compliance Audit. It also allows the factory in question to compare its existing compliance system with PUMA's requirements and work on potential areas for improvement before the full audit is conducted.

## 3.3 Zero Tolerance ("ZT"), Critical ("CI"), Major ("MI") and Regular ("RG") Issues

PUMA's system for rating Code of Conduct compliance organizes instances of noncompliance into four categories: Zero Tolerance ("ZT") Issues; Critical ("CI") Issues, Major ("MI") Issues, and Regular ("RG") Issues. When an instance of noncompliance is found, the result is a reduction of the factory's audit score according to the following schedule:

- A ZT results in a 30-point reduction and automatic failure of the audit.
- A CI issue results in a 10-point reduction and a requirement that the factory takes immediate action to remediate, in order to maintain an opportunity to pass the audit.
- A MI issue results in a 5-point reduction, where the factory may still achieve a passing grade but must nonetheless take action to remediate; and
- An RG issue results in a 1-point deduction. RG issues are considered non-urgent, and factories are given reasonable timeframes in which to address them.

For the full list of all Zero Tolerance ("ZT"), Critical ("CI"), Major ("MI") and Regular ("RG") Issues, please refer to the Social Handbook. In the Environmental Handbook, we only list the parts that are relevant to the environmental requirement.

### *Zero Tolerance ("ZT") Issues*

Zero Tolerance Issues are unacceptable violation of PUMA's Code of Conduct. If a ZT issue is discovered, the factory will automatically fail its audit.

There is no possibility for the new supplier to produce any PUMA goods if ZT issues are present.

ZT issues can be found as follows:



NO	ZT ISSUE	DEFINITION
1	<b>Illegal Discharge of Wastewater</b> (see Environmental Standards handbook)	Discharging untreated wastewater into natural water bodies such as rivers and streams (or into the ground)
2	<b>Illegal disposal of Hazardous Waste</b> (see Environmental Standards handbook)	Illegally disposing hazardous waste (such as used chemicals, used oils, used batteries etc.) in unauthorized waste disposal sites.
3	<b>Falsified Records</b> (see also PUMA Sustainability Handbooks Social Standards)	In all instances, a false representation of a matter of fact whether by word, conduct, or documentation. Examples include hiding records, illegal practices, (such as coaching workers for falsified answers in interviews, paying bribes or wherein documentation is found to be inconsistent with other records found at the facility, including verification from workers and other entities, such as civil society and government, as may be pertinent).
4	<b>Unauthorized Sub-Contracting</b> (see also PUMA Sustainability Handbooks Social Standards)	Any operation that suppliers carry out in outsourced factories, that has not been approved or audited by PUMA

### Critical ("CT") Issues

Critical Issues constitute a serious violation of PUMA's Code of Conduct. They will be treated with higher priority than other findings. Discovery of one (1) or more CIs may lead to a **failure** of the PUMA Compliance Audit or to a significant downgrade of the final audit grade. CI issues relevant to the environmental requirement are defined as follows:

NO.	CI ISSUE	DEFINITION
1	<b>Sub-license Mission (Environment Permit, Fire Safety Permit, etc.)</b>	Missing or invalid fire safety, building safety or environmental license/permit/certification, as legally required by local authorities.

### Major ("MT") Issues

Major Issues are crucial violations of PUMA's Code of Conduct. **Suppliers** are expected to remediate issues with immediate action or within a reasonable timeframe.

### Regular ("RT") Issues

Regular Issues are considered minor violations of PUMA's Code of Conduct. They are treated with lower priority than other issues discovered during the audit. The timeframe for resolving each RI depends on nature of the issues. The PUMA auditor or External Monitor shall provide guidance on the correction and implementation of each issue with factory management during the audit summary meeting.

### 3.4 PUMA monitoring and Environmental Performance Rating System

PUMA has moved from individual brand environmental audits to the use of industry-wide tools, such as the Higg Index Facility Environmental Module (FEM) 3.0. PUMA requires an annual external verification of the self-assessment. This external verification may be completed by approved verifiers from PUMA’s internal team, other credited brands, or third-party organizations on the approved list from SAC.

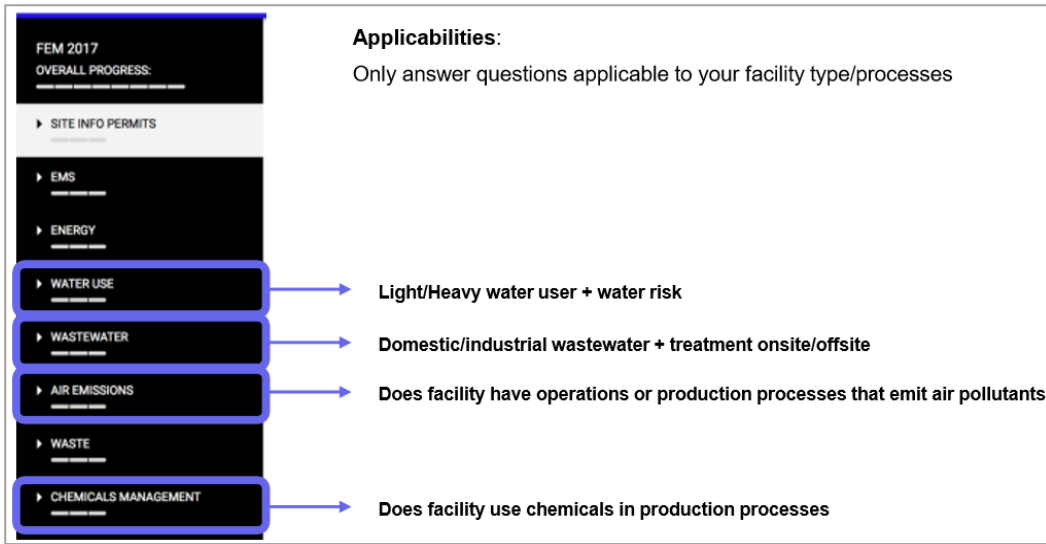


Figure 2: SAC Higg Index FEM 3.0

PUMA’s Environmental Performance Rating System is based on the ratings developed from the factories’ Higg FEM scores verified by SAC approved verifiers: A, B+, B-, C and D. The minimum passing grade from the Environmental perspective is 40% (i.e., only A, B+ and B- ratings are passable) and C and D are failure ratings. Considering the tool and the ratings and corresponding grades are:

RATING	DEFINITION
A	<p>80% to 100%   PASSED – VERY GOOD RESULT</p> <p><i>Routine: Once per calendar year</i></p> <p>Aspirational level of environmental performance achieved. The PUMA Environmental Sustainability requirements have been met, and there are indications of strategic initiatives to maintain environmental compliance with the PUMA Code of Conduct and environmental policies.</p>
B+	<p>60% to 79.99%   PASSED – GOOD RESULT</p> <p><i>Routine: Once per calendar year</i></p> <p>Progressive level of environmental performance achieved. Minor issues are of relatively insignificant importance and can be rectified immediately. The most basic requirements are mostly met.</p>

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**B- 40% to 59.99% | PASSED – SATISFACTORY RESULT - REMEDIATION NECESSARY**

Foundational level of environmental performance achieved. Minimum level required for a PUMA supplier. Routine: Once per calendar year. Factories need to provide an action plan to address the findings listed in the Performance Improvement Plan (PIP) in the next 6 Months for checking by PUMA Environmental Sustainability Team onsite and offsite

Noncompliance issues are of minor importance, but there are a larger number of such issues found compared to a B+ rating. The most basic requirements are in general met.

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**C 20% to 39.99% | FAILED**

Foundational level of environmental performance not achieved. Routine: Once per calendar year. Factories need to provide an action plan to address the findings listed in the Performance Improvement Plan (PIP) in the next 6 Months for checking by PUMA Environmental Sustainability Team onsite.

Serious or numerous issues found during the assessment that must be rectified immediately.

For existing factories, a follow up PIP progress verification is conducted by PUMA Environmental Sustainability Team within six (6) months to check the remediation status of identified issues.

New factories will not be provided with manufacturing authorization until the issues identified are rectified and an A or B rating is achieved.

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**D Equal or Below 19.99% | FAILED – FACTORY LACKS BASIC ENVIRONMENTAL MANAGEMENT SYSTEMS**

Many serious non-compliant issues found.

If this concerns an initial audit of a potential new factory, a business relationship will not be started. For an assessment of an existing factory, a phase-out plan could be considered, leading to the eventual termination of the business relationship, i.e., Deactivation.

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Figure 3: PUMA rating system

PUMA suppliers shall identify the opportunity to improve through a Root Cause Analysis and set up a Corrective Action Plan to be reviewed and agreed by the PUMA sustainability Team.

PUMA expects factories to provide channels for staff and external stakeholders such as communities to raise their concerns or suggestions.

PUMA offers multiple communication channels to receive grievance from factory workers, external individuals or organizations, Civil Society Organizations or communities.

PUMA commits to remedy and thus offers a confidential, third-party complaints/grievance channel for workers and external organizations to voice concerns. The aim of this process is to expedite the resolution of problems or issues that workers have already raised through the factory grievance mechanism but have failed to be resolved. Once a concern is raised, we actively follow up on remediation and aim to ensure the mitigation and remediation measures taken are according to the consideration of the person who raised the complaint. We expect the factory will set up preventive measures such as training factory staff on the policy. rules and regulations related to the specific issue raised through PUMA hotline.

The contact numbers and an email address of the PUMA Sustainability Team are displayed in each factory producing for PUMA through the mandatory posting of the PUMA Code of Conduct. Contact information is provided in the local language to be readily accessible.

Details of grievance mechanism procedures can be found in PUMA social Handbook, page 40.

### 3.5 Reduction & Offsetting of Carbon Emission

PUMA is an active participant of the Carbon Disclosure Project and recognizes the importance of limiting global warming to two degrees Celsius as per the Paris Agreement. PUMA commits to contributing its fair share to achieve this two-degree goal and even go below 2-degree Celsius. To address this commitment, PUMA has set up a Science-Based Target for Climate Change, which was approved by the Science-Based Target Coalition and published in 2019. It follows a well below 2-degree Celsius pathway:

- Reduce greenhouse gas emissions from PUMA's own entities (Scope 1 and 2) by 35% compared to the 2017 baseline (absolute reduction)
- Reduce emissions from PUMA's supply chain (Scope 3: purchased goods and services) by 60% relative to sales

PUMA combined our SBT agreement with an increased effort to support the use of renewable electricity by purchasing RECs for countries where PUMA has a major presence and renewable electricity cannot be purchased directly. We purchased RECs worth 50% of PUMA's emissions from electricity for 2018 retroactively and increased that figure to 74% in 2019 and to 100% in 2020.

Because energy consumption is directly linked to carbon emissions which accelerate global warming, PUMA encourages suppliers to use renewable energy sources where possible to curb their own carbon emissions and footprints. Beginning in 2017, PUMA started to work with stakeholders to launch feasibility study projects to inspire suppliers to install and use rooftop solar onsite, which includes:

- Vietnam Improvement Project or "VIP" (2017-2019)
- GIZ Project Development Program or "PDP" (2019- still in progress)
- Partnership for Cleaner Textiles or "PaCT" (2019- still in progress)

PUMA also explores other tools, such as Direct Power Purchase Agreements (DPPA), Renewable Energy Certificates (REC), Green Tariffs etc. to provide more options for suppliers who are on the same roadmap as PUMA to achieve our common ambitious targets for Climate Change.

### 3.6 Sustainability Charter for Own Entities & Suppliers

PUMA's Sustainability Team has also created Sustainability Charters that provide our offices, stores, warehouses, and factories with a tool for identifying easy improvements that can be made toward environmental protection. The factory management at each of these locations is encouraged to complete the Charter and display a signed copy at the building's entrance or reception, indicating to all employees which actions have already been taken and which are in progress.

### 3.7 Environment Management Systems (EMS)

Environmental Management Systems ("EMS") are important tools for improving environmental performance by helping organizations measure and manage their environmental activities and initiatives. In addition to PUMA's own operations,

all PUMA suppliers shall implement an Environmental Management System ("EMS") that ensures legal compliance and the implementation of an environmental program that emphasizes continuous improvement.

PUMA recommends implementing a certified EMS for **large suppliers** (e.g., the employment of more than 1,000 workers) and other suppliers that have **substantial environmental impact** (e.g. factories with wet processes operations.)

PUMA encourages suppliers to secure a certified EMS program, such as ISO 14001:2015, energy management systems such as ISO 50001: 2011 and/or the EU Eco-Management and Audit Scheme EMAS, to monitor compliance and implementation of environmental initiatives.

For more information on the above certified EMS programs, please visit the ISO website (for information on [ISO 50001](#) and [ISO 14001](#)), as well as the European Commission’s [website](#).

### 31.8.1 Legal Compliance

Full legal compliance forms the basis of every EMS. In most countries, official permits are necessary as proof of compliance with legal requirements. Different production processes may require distinct types of permits (e.g., a discharge permit for dye houses, or an air emission permit for operation of a large-scale boiler or electric power generator). The scale and nature of an operation may therefore also affect which permits are required.

Typically, permits cover air emissions, effluent, and legal waste disposal, both for conventional and hazardous waste. The following permitting documents must be secured by PUMA entities and supplier factories where applicable and as required by local laws:

- Environmental Impact Assessment (EIA)
- Environment Compliance Certificate (or its exemption) as justified by the EIA
- Related permit to operate a business following clearance of complying with relevant environmental protection and pollution regulations
- Environmental permit to operate wastewater treatment facilities
- Environmental permits for sources of air emissions (e.g., boilers, power generators, dust collector, onsite incinerator, etc.)
- Environmental permit or clearance for transport and disposal of solid waste
- Environmental permits for storage, handling, transport, and disposal of hazardous waste
- Other environmental permits required by national environmental laws

The PUMA Sustainability Team expects suppliers to maintain and validate all required permits in accordance with relevant environmental legislation. To ensure a factory is in compliance with the local legislation and in accordance with the PUMA Sustainability Standards, proof of written environmental permits is required in the PUMA Compliance Audit, a precondition for every supplier’s production authorization.

### 31.8.2 Plan-Do-Check-Act

The EMS shall be geared towards continuous improvement that follows the Plan-Do-Check-Act (“PDCA”) concept outlined in Figure 4:

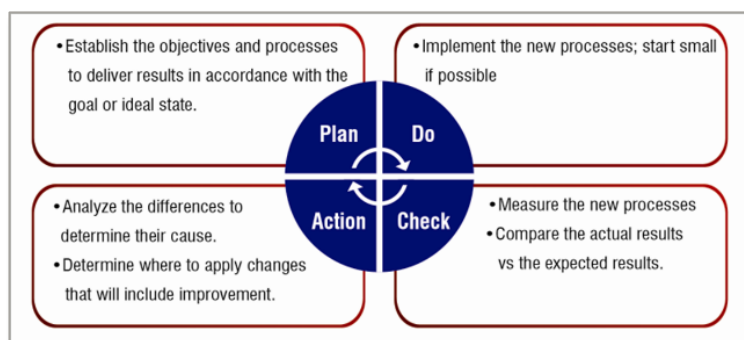


Figure 4: Plan-Do-Check-Act (adapted from ISO)

### 3.1.8.3 Setup Targets for E-KPIs Improvement to Align with PUMA Roadmap

PUMA designed an in-house tool for core suppliers to manage their own eKPIs and to set up improvement targets based on them to align with PUMA's environmental targets and roadmap.

## 3.8 Production-Related Environmental Standards

PUMA's targets are in place to reduce our environmental impact and become more sustainable. This section reviews the following E-KPIs:

- Air Pollution
- CO<sub>2</sub> Emissions
- Water Use/Efficiency
- Water Pollution/Wastewater
- Waste
- More Sustainable Raw Materials
- Coal-fired boiler phased out by 2025

### 3.8.1 Air Pollution

All suppliers must adhere to the local regulations pertaining to air pollution. Depending on the type and size of a factory's operations, installation of devices that help prevent air pollution might be necessary. Typical examples of such devices include:

- Filters for exhaust systems carrying volatile organic compounds (e.g., solvents)
- Dust filters for exhaust systems from dusty areas (e.g., knitting departments; outsole grinding or buffing areas in shoe factories)
- Filters for larger burners (e.g. for steam generators or heating systems)

Regular checks on the quality of discharged air from all operations must be performed to ensure that all equipment is working properly. The records for these checks shall be kept for a minimum of two years.

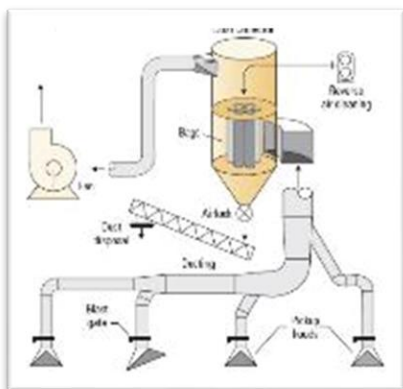


Figure 5: Dust filters for exhaust systems

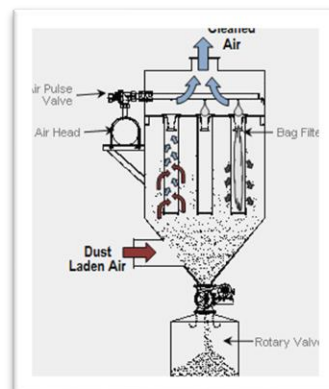


Figure 6: Filters for larger burners

By 2025, industry best practices for air pollution are met by 90% of PUMA core suppliers.

### 3.8.2 CO<sub>2</sub> Emissions

#### 3.8.2.1 Legal Compliance

PUMA requires that all energy-related machinery operated by suppliers must be in compliance with all relevant local legislation, both in terms of the environment and health and safety (see the Health and Safety Handbook for further details). Factories must register with local environmental authorities all large boiler operations, coal burners, and other types of equipment that generate emissions. In addition, factories must comply with all local environmental standards on air emissions, safe storage of fuel, and other requirements for the aforementioned types of equipment.

#### 3.8.2.2 Targets

As aligning the Commit from PUMA Science-Based Target for Climate Change and that to the UN Fashion Charter, PUMA continues reporting on our carbon footprint and climate change program as part of our company's mainstream financial reporting, as well as to a responsible corporate engagement in climate policy.

In line with this joint effort to limit global warming to well below two degrees Celsius by the end of 2050, PUMA has set the Science-Based Target to reduce greenhouse gas emissions from PUMA's own entities (Scope 1 and 2) by 35% (absolute reduction), and to reduce emissions from PUMA's supply chain (Scope 3: purchased goods and services) by 60% relative to sales compared to the 2017 baseline.

For the supply chain part, PUMA has set a target to aim for at least 25% of the energy consumed in our core factories to come from renewable sources. Moreover, we also have the ambition to phase out coal fired boilers in our core supply chain. Both targets should be completed by 2025.

We design and launch an in-house tool for supply chain partners to set up their own target for climate change, water and waste. We also roll out training for suppliers to guide them on how to use it. The requirement is that the targets set by our suppliers have to be aligned with PUMA's ambitious levels but they are encouraged to even go beyond. Some large volume suppliers have upgraded targets to set up their own Science Based Targets.

#### 3.8.2.3 Guidelines – Carbon Footprint & Energy Efficiency

Over the last several years, global energy costs have fluctuated dramatically. During this same period, the political and social focus on the impact of CO<sub>2</sub> emissions and climate change has increased and intensified.

PUMA believes that running energy efficiency programs in every factory, as well as in larger offices, warehouses and stores, will reduce both energy costs and CO<sub>2</sub> emissions.

**The carbon footprint of production and products can be reduced largely by improving energy efficiency and opting for renewable energy.**

A first step towards increasing energy efficiency is measuring and analyzing initial energy consumption, which allows us to identify areas, where energy-saving measures can be implemented. Taking simple measures to reduce energy usage has proven to be profitable, given that investment costs are usually very low or nonexistent. Examples of such measures include:

- **switching off** machines when they are not in use, using servo motors in sewing machines, and
  - changing lighting sources to **energy-efficient LED lighting**.
  - Another option for reducing energy use is to optimize the heating and cooling of buildings.
- Typically, air conditioners or heating systems can be adjusted to a range that more closely fits the outside temperature, helping to reduce the **intensity** of the heating or cooling system and saving energy as a result
  - (For instance, when the outside temperature is 30 degrees Celsius, buildings may program the inside temperature to be 23 instead of 20 degrees Celsius, reducing the energy required to cool the building).



- Furthermore, **effective insulation** of buildings helps to save energy used for heating and cooling.
- **Waste heat** from the production process may be used for heating purposes of the building, as well as natural ventilation or evaporation cooling effects for energy-efficient cooling.

A list of typical energy efficiency measures is provided below for the supplier's reference.

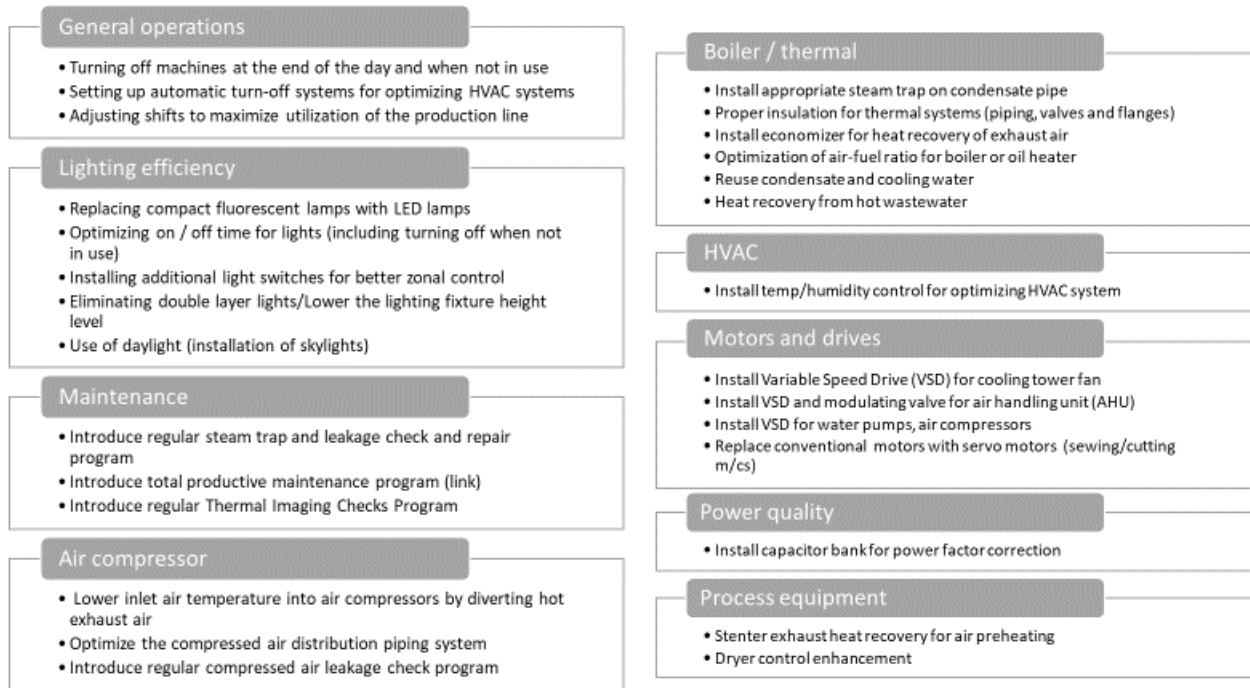


Figure 9: Typical energy efficiency measures in apparel and footwear industry

### Renewable energy and REC certificate

Renewable energy plays an important role in reducing the carbon footprint and achieving our climate targets. Onsite rooftop solar PV is the most common way of sourcing renewable energy in buildings and factories. In this system, electricity is produced through solar PV panels on rooftops or nearby land for direct consumption, storage or supply to the grid. It is possible to directly consume the generated electricity to power operations.

The other key onsite option for sourcing renewable energy is by opting for renewable biomass, which are generally agricultural/forestry byproducts and residues to generate steam. Biomass can replace coal in boilers with a minor retrofit. However, biomass requires more storage space and needs to have robust air pollution control equipment to manage particulate matter (PM).

To meet the CO<sub>2</sub> emissions reduction target, we specify the requirement for core suppliers to purchase REC certificates locally, if they are facing challenges to meet the PUMA ambition level (5% renewable energy per year, 25% by 2025). We connect the targeted suppliers with stakeholders that can provide the best offer for PUMA suppliers and can ensure the reliability of these RECs certificates. We also provide a projection in a scenario of what's the level of investment needed if the factories are not able to reduce CO<sub>2</sub> emission by other means. This is to make sure the suppliers are fully aware and confident about their roadmap to achieve their targets on climate change.

### Coal fired boilers phase out

Coal fired boilers are considered a highly polluting way of generating heat onsite. Their level of greenhouse gas emissions is very significant compared to other, cleaner energy sources. They also constitute a bigger risk for emitting other pollutants in breach of regulations and industry standards. PUMA has a clear target aligning with the industry coalition UNFCCC Fashion Charter. We are starting pilots in Vietnam to provide feasibility studies for those factories still using coal fired boiler how to find alternative heating solutions instead of coal. The scale of this project will be expanded (to other countries and other factories) once this pilot has proven to be successful.

### 3.8.2.4 Carbon Footprint & Energy Efficiency - Case Studies

#### 1. Renewable Energy:

- a. Leading Star (Tier 1 Apparel Supplier): written article by PUMA CatchUp

The factory, which makes knits and woven apparel for PUMA, installed solar panels on its roof last year in cooperation with PUMA and German development agency GIZ PDP. After the first phase of the project was completed in December 2020, Leading Star was able to reduce its carbon emissions from electricity by 25%. Per year, this installation alone will save 1,331 tones of CO<sub>2</sub>.



<b>Renewable project (Onsite)</b>	<b>Solar PV (1MW<sub>p</sub>)</b>
Renewable coverage	25%
GHG Reduction	1,331 tCO <sub>2</sub> e/ year

There are plans to expand the solar installation so that half of the electricity used by the factory will come from solar panels.

- b. Formosa Taffeta Vietnam Co., Ltd. (Tier 2 Fabric Supplier):

The factory, which makes fabric for PUMA and several brands, installed solar panels on its roof with a total capacity of 3.45 MW<sub>p</sub> in 2020 and 2021 to cover 9.4% of its power demand after two phases of installation. Per year, this concrete action alone will avoid 2,851 tons of CO<sub>2</sub> emitted.



<b>Renewable project (Onsite)</b>	<b>Solar PV (3.45 MW<sub>p</sub>)</b>
Renewable coverage	9.4%
GHG Reduction	2,851 tCO <sub>2</sub> e/ year

There are plans to expand the solar installation in the 3rd phase and participate in the pilot phase of the direct power purchase agreement (DPPA) in Vietnam.

- c. Shenzhou

Currently, Shenzhou already gets some of its energy from a nearby wind farm. But it has now agreed to invest in a project, which will increase the wind energy output from 45 Megawatts to 210 Megawatts by 2030 in two stages. Once both stages are completed, Shenzhou will save more than 420,000 tones of CO<sub>2</sub> equivalents per year.



<b>Renewable projects (offsite)</b>	<b>Windmill (210 MW) 45 MW implemented +65 MW by 2025</b>
Projected renewable coverage	34% by 2025
GHG Reduction	420,000 tCO <sub>2</sub> e

With determined action such as by our partner Shenzhou, we can make huge steps towards reaching our climate goals.

2. Energy Efficiency:

a. Aleron (Vertical Footwear Supplier)

Under the Vietnam Improvement program in partnership with IFC, Aleron has installed 2 Variable Frequency Drives (VFDs) on both ID & FD fan of the thermic fluid heater and regulated the operational frequency. Therefore, installing (VFDs) helped the factory to:

- Regulate the frequency of the fans (speed) based on the demand of combustion and allow efficient combustion of fuel within the boiler
- Switch off the fans when not required.
- Eliminate power surges and mechanical shock of switching the motor from Off to 100% power

This initiative led to both thermal and electrical savings for the factory by up to 20% -30% of the thermic fluid heater



Project	Thermic oil heater performance optimization by installation of VFDs in ID and FD fans
GHG Saving	198 tCO <sub>2e</sub>
Biomass Saving	0.51 %
Electrical saving	1.34%
Payback	3.5 months

b. Square Fashion Limited (Vertical Apparel Supplier)

In Bangladesh, we have joined PaCT program in partnership with International Finance Corporation (IFC). Under this program, Square Fashion Limited, a vertically integrated garment unit, installed a waste heat recovery system. This initiative has helped the factory to recover waste heat from the gas engine exhaust by utilizing this energy to generate steam for process heating. By installing a waste heat recovery boiler with a capacity of 5.7 tons of steam per hour, the factory saves natural gas consumption by about 340 m<sup>3</sup> per hour. Per year, this installation alone will save over 2 million m<sup>3</sup> of natural gas and achieve greenhouse gas emission reduction of 4,354 tons of CO<sub>2</sub> equivalent.



Project	Waste heat recovery boiler
Natural Gas Saving	2,021,505 m <sup>3</sup> /year
GHG Reduction	2,354 tCO <sub>2e</sub> /year
Payback	9 months

c. Xin Da Co. Limited (T2 Footwear Supplier)

T2 footwear supplier Xin Da Co. Limited has successfully replaced its coal fired boiler with a natural gas fired boiler as part of our engagement with the Apparel Impact Institute (All) for the Clean by Design program. This would lead to a coal saving of 1,000 Tons/Year and greenhouse gas reduction of 2,769 tCO<sub>2</sub>e/Year, with a solid business case because of a payback period of one year.



Project	Coal replacement
Coal saving	1,000 Tons/Year
GHG reduction	2,769 tCO <sub>2</sub> e/Year
Payback	12 months

### 3.8.3 Water Use / Efficiency

The efficient use of water resources plays a critical role in the implementation of sustainable manufacturing. Even though 3% of the earth’s volume of fresh water supply is technically a renewable resource, the supply of clean and fresh water is steadily decreasing, as the world’s population continues to rise.

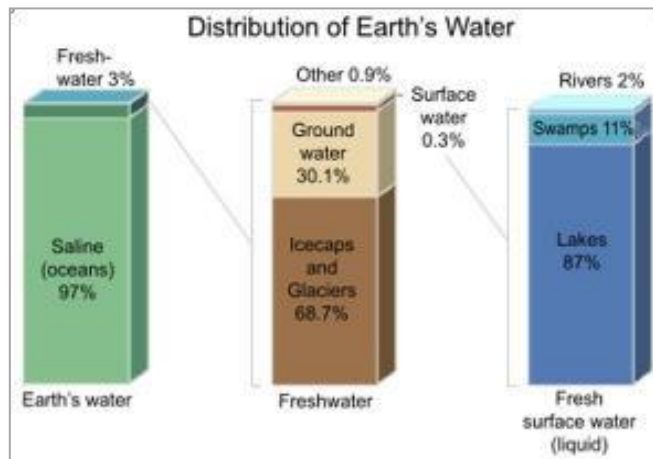


Figure 9: Distribution of the Earth’s Water

**Water usage** in a typical dyeing mill can easily top **20,000 m<sup>3</sup>** per day and cost more than **10,000 USD** annually in water and sewer fees.

#### 3.8.3.1 Target

The PUMA 10for25 target for water use is to reduce 15% of water intensity for our production line, based on the sales by 2025, compared to our baseline in 2020.

For the supply chain part, we design and launch an in-house tool for supply chain partners to set up their own target for climate change, water and waste. We also roll out training to the suppliers to guide them how to use it. The

requirement is that the targets set by our suppliers need to be at least aligned with PUMA’s ambitious level and they are encouraged to go beyond. Some large volume suppliers are having upgraded targets to set up their own Science Based Targets.

### 3.8.3.2 Guidelines – Water Efficiency

On top of being compliant with local environmental discharge requirements by legislation, the following shall serve as recommendations:

#### **REUSE OPTIONS**

There are many opportunities to **reuse** wastewater in a textile mill. Some mills have substantially reduced operating costs by installing water reuse systems.

- Many dye-houses have successfully implemented heat exchangers in their wastewater stream.
- Others created a closed water cycle:
  - Final rinse water from **dyeing** can be used as makeup water for the dye bath, and
  - Final rinses from **scouring** and **bleaching** may be used for makeup water in de-sizing.
- In addition, wastewater from many sources may be suitable for the washing process equipment and floors (after sweeping or other dry clean-up).

#### **SIMPLE SOLUTIONS**

<i>POTENTIAL IMPACTS</i>	<i>EXAMPLES OF ACTIONS</i>
<p>Water usage can be reduced in mills by making simple <b>housekeeping changes</b>, in addition to process modifications.</p> <p>For instance, a single hose left running will waste 27.2 m<sup>3</sup> of water daily and cost more than US\$5,000 annually in increased water usage.</p>	<p>Attach a spring-loaded nozzle, costing less than 5 USD, to the hose.</p>
<p><b>Process changes</b> can also result in substantial reductions in water and energy use.</p>	<p>Water flow through a rinsing process can be reduced by 50% if counter-current (also known as “two-stage”) rinsing is used.</p>

#### **SUGGESTED METHODS FOR WATER REDUCTION & REUSE**

##### EQUIPMENT

- One size does not fit all; use small-volume equipment for small production runs
- Place spring-loaded nozzles or timers on all water supplies to ensure they turn off when not in use
- Avoid filling process equipment with water from unmetered hoses; place meters on water supplies feeding process equipment

##### PROCESSES

- Reuse wastewater from other processes for those that do not require high-quality water
- Use counter current or multi-stage rinsing to reduce water use



**COUNTER-CURRENT RINSING**

Counter current rinsing is a process where the "dirtiest" fabric contacts the "dirtiest" water before clean water rinses the fabric as it leaves the process. Continuous rinsing processes are usually designed with counter current rinsing. Batch processes can be modified to incorporate two-stage or multi-stage rinsing, where water used for rinsing the previous bath is used to provide initial rinsing of the next batch. This water is then discharged, and clean water is used to provide final rinsing. A two-stage process like this one may replace three separate rinsing cycles using clean water to achieve the same level of cleanliness with a fraction of the water required.

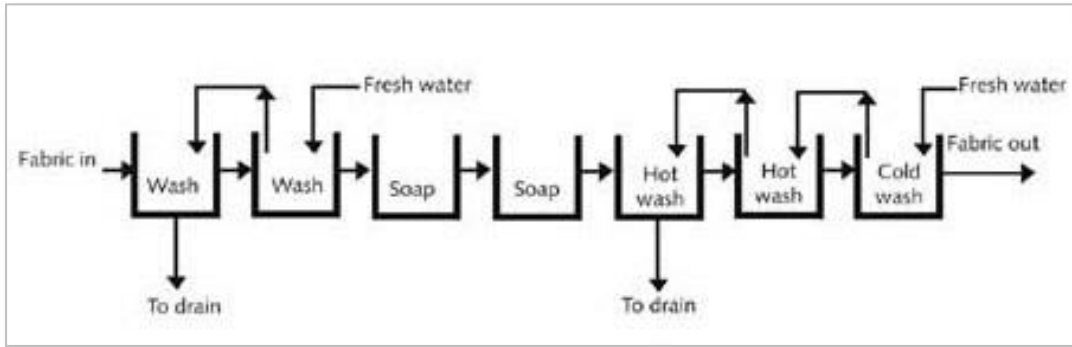


Figure 10: Example of counter current rinsing in fabric dyeing process

**Water efficiency - Case studies**

d. Hamza Textiles (DBL Group) (T2 Fabric supplier)

Under the PaCT program, Hamza textile replaced its conventional garment washing machines with an ozone washing system, which gives much better performance in washing quality with reduced consumption of resources. Ozone Washing systems not only save water but also chemicals such as bleaching agents, fabric softeners and energy, which eventually results in reduced operating costs.



Project	Ozone washing
Water Saving	69,225 m <sup>3</sup> /year
Electricity saving	151 MWh/year
Natural Gas saving	306,513 Nm <sup>3</sup> /ye
GHG Reduction	780 tCO <sub>2</sub> e/year
Payback	28 months

**3.8.3.3 Water Pollution / Wastewater**

**Wastewater** is defined as any water that has been affected by human use, whether through washing, flushing, manufacturing, or other activities. Wastewater is the largest waste stream from most textile mills' operations, including from washing, bleaching, and dyeing operations. Textile mill wastewater is often contaminated with process chemicals (e.g. dye, salt, bleach, detergent, etc.), oil and heat from hot water discharges.

As a result, wastewater **discharge** permit limits are often difficult to meet. Permit limits may exist for the following types of wastewater discharge:

- Wastewater volume
- BOD (biological oxygen demand)
- COD (chemical oxygen demand)

- Aquatic toxicity
- Heavy metals content
- Others per local regulation

### 3.8.3.4 Legal Compliance

All suppliers must have the necessary permits and licenses from their local authorities to **extract** water from local supplies (whether using underground water, surface water, or other public sources), as well as to discharge wastewater into the public sewer system. Moreover,

- Before the final discharge of wastewater into the public sewer system, PUMA suppliers or PUMA entities must comply with national environmental regulations and standards in their jurisdiction.
- Under no circumstances shall wastewater from PUMA suppliers or PUMA entities be discharged to the environment (including natural bodies of water and groundwater) and surrounding communities without undergoing a treatment process approved by local authorities.

We set a target of 90% compliance for conventional parameters, MRSL and heavy metal requirements.

All PUMA's core factories with wet processing **must** therefore perform wastewater testing according to ZDHC Wastewater Guidelines on an annual basis.

The purpose of wastewater testing is twofold, and achieves the following aims:

- Ensures PUMA's vendors and material suppliers apply adequate wastewater treatment methods and technology to their processes, avoiding any negative environmental impact on the receiving body of water
- Ensures industry-specific priority hazardous chemicals (as defined in the ZDHC's Manufacturing Restricted Substances List "MRSL") have been eliminated from PUMA's supply chain

In the end of 2016, ZDHC published the first official Wastewater Guidelines, PUMA adopted this collaborated industrial document and continue to implement positive environmental impact in supply chain globally. Beginning in 2017, PUMA requires all wet-processing factories to upload their ZDHC wastewater test reports on the ZDHC Gateway.

PUMA believes in transparency and local stakeholders' right to know what is being discharged into local water bodies. Therefore, we ask our suppliers with wet-processing facilities to publish their test reports on an online platform run by the Chinese NGO, Institute of Public and Environmental Affairs (IPE). To upload or access the published test reports, please visit IPE's [website](#).



Figure 11: Wastewater improperly discharged directly into natural body of water (left) vs. Wastewater properly treated before discharge (right)

In case of an onsite wastewater treatment plant, the discharge of the treated water must be controlled according to the parameters mentioned according to local environmental regulations and the [Wastewater Guidelines \(Leather Wastewater Guidelines Addendum, MMCF\)](#) of the ZDHC. All values listed in Appendix A



are PUMA requirements. Wastewater treatment is a complex process and treatment solutions may vary from plant-to-plant, ZDHC develop [Wastewater Treatment Technologies](#) and [Wastewater Treatment System Operator Minimum Qualifications Guidelines](#) along with other training programs to close the knowledge gap and as reference books for daily operation.

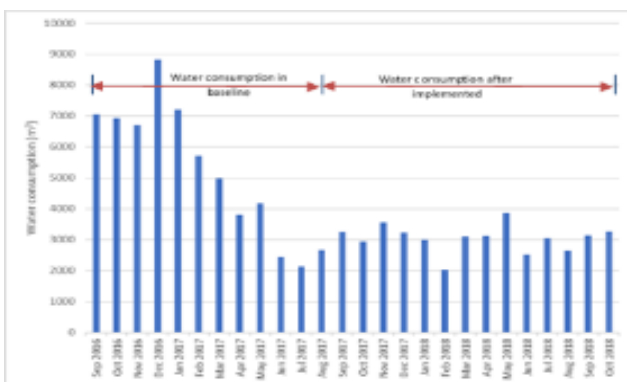
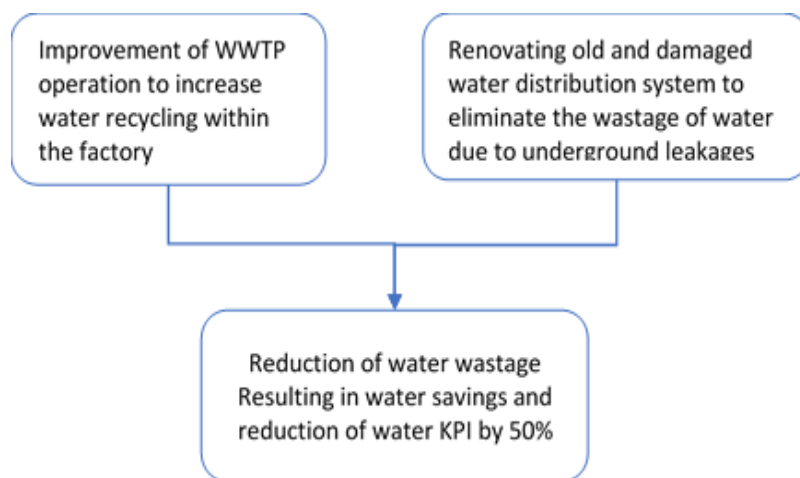
For more information on wastewater discharge standards, please consult:

- The PUMA Sustainability Handbooks – Chemical Management
- The [Wastewater Guidance](#) Document of the Zero Discharge Hazardous Chemicals (“ZDHC”) Initiative

## Wastewater - case studies

### Tan Thanh Hoa (T2 Footwear Supplier)

As a part of our engagement in the Vietnam Improvement Program (VIP), the factory used rainwater and wastewater after treatment for toilet flushing. The plant has also improved the operation of the wastewater treatment system, thus increasing the percentage of wastewater reused. In addition to this, they have renovated the incoming water pipeline to reduce water leakage. As a result of these initiatives, the factory was able to save 41,727 m<sup>3</sup>/year, with a 60% reduction in water consumption as compared to pre project scenario.



Project	Water reuse and recycling
Water Saving	41,727 m <sup>3</sup> /year (- 60%)
Payback	< 1 month

### 3.8.3.5 Soil & Groundwater Protection / Leaks & Spills Prevention & Management

Soil and groundwater can be contaminated by a variety of inputs, including wastewater, chemicals, oils, and other toxic liquid substances. It is important to avoid migration of any of these liquids into the ground, or the aquatic environment. Hazardous and toxic substances that could pose a contamination threat to groundwater or the soil must be stored in a secondary containment, or a container designed to prevent hazardous liquids from leaking and polluting soil or water. Common techniques of secondary containment include the use of spill berms to contain oil-filled equipment, fuel tanks, truck washing decks, or any other sites that pose a risk of contamination. In addition, factories must ensure that **storage areas** and containers are designed and utilized in a manner that minimizes the risk of releasing their contents to the environment.

#### SIMPLE SOLUTIONS

POTENTIAL IMPACTS	EXAMPLES OF ACTIONS
<p><b>Spills and clean-ups</b> can be a major source of water pollution. In most mills, process chemicals are stored, mixed, transported, and spilled unintentionally. Even spills that seem small or minor can have major impacts on wastewater. A spill of five pounds of salt will contaminate 10,200 m<sup>3</sup> of water, and the bursting open of a 50-pound bag of salt during handling could contaminate 1.2 million m<sup>3</sup> of water.</p>	<p>If a liquid product is spilled, responding with a dry clean-up (i.e. using absorbent clay and sweeping), is a better and safer solution than washing it down the floor drain.</p>
<p><b>Leaks</b> may also cause water inefficiencies in mills. Heavy use of salt, acid, and caustic often results in valve and piping failure, but the same is not the case for plastic piping.</p>	<p>Replacing steel valves and piping with plastic is therefore a low-cost way to reduce leaks.</p>

#### SUGGESTED METHODS FOR PREVENTING WATER POLLUTION

The following best practices will help ensure the safeguarding of hazardous and toxic substances:

##### STORAGE

- Store dry materials, such as bags of salt or dye drums, off the floor and away from liquids by placing catch pans beneath the material
- Plug floor drains in material storage areas
- Build curbs around storage areas to keep spills in and water out
- Remove water supplies from storage areas
- Use dry clean-up methods. Provide brooms, vacuums, and absorbents
- Provide relevant work areas with handling tools, and training for operators so they can help prevent spills
- Provide operators with measuring equipment and recipes for each mixture
- Optimize chemistry (correct temperature can reduce the use of salt and dye)
- The entire storage area shall be built as a secondary containment (e.g., by using special paint to make the floor impermeable and by building surrounding bund walls)
- Storage areas shall be located away from watercourses and sensitive boundaries. In addition, they shall not be adjacent to areas of public use
- Storage areas must be protected against vandalism
- Containers must be bound and sealed (there shall not be any storage of **open containers** in an outdoor area, even when empty, to reduce the risk of contaminating rainwater) Storage areas must be clearly marked, and containers shall be clearly labelled
- Factories are urged to not exceed the maximum storage capacity of their storage areas

**EQUIPMENT**

- Containers must be regularly inspected.
- In cases where secondary containment installations are not possible, protection trays may be used for all containers. One size does not fit all; use small-volume equipment for small production runs

- Select (plastic) valve and piping material to minimize corrosion and leaks
- Avoid filling process equipment with water from unmetered hoses; place meters on water supplies feeding process equipment

**PROCESSES**

- Test incoming water supply for minerals or chemicals that negatively affect the process

It is the producer's obligation to have **emergency plans** ready for hazardous and toxic substances, particularly in the event of accidents or cases of damaged or leaking containers.



Figure 12: Migration of toxic substances into the groundwater, prevention through secondary containment

**SPECIAL NOTE ON OIL CONTAMINATION**

At many factories and plants, minor oil spills and oil leaks are among the most prevalent and least noticed contamination events. These oil spills usually originate from the use of lubricants, fuel oil, and other commonly found oils. The effects of these spills can be serious: oil contains hazardous and toxic chemicals that can contaminate the soil and groundwater where drinking water might be extracted, posing a direct risk to human health. In water run-off, like in case of rain, spilled oils can be carried into public drainage systems, often ending up in rivers, seas, or other surface water systems.

Oil does not dissolve in water and can form a very thin film on the water surface, polluting a vast area of surface water even with a small amount.

The oil film covering the surface of the water can prevent important biochemical processes, such as photosynthesis, and therefore can pose a significant danger to the aquatic ecosystem.

Factories shall contain all oil spills and leakage when such contamination events occur to reduce their environmental impact. Even when it may go to a wastewater treatment facility, oil is both difficult to remove from the water and can affect the physical-chemical process of wastewater treatment.

All Factories must ensure that:

- Its **employees** are aware of the risks of improper handling of oil, oil spills and leakages
- All containers, of any size, should always have secondary containment equipment

Even though oil may be considered "dirty" or contaminated, many technologies are available to reprocess the oil and allow it to be reused, either as low-grade lubricant or fuel increasing the dirty oil's utility.

### 3.8.4 Waste

Most manufacturing processes result in the generation of byproducts. These waste products pose a threat to ecosystems and communities if they are not treated and disposed of in a safe, responsible manner that addresses their potential threat in the short- and long-term.

The increasing volume of waste produced during many processes associated with manufacturing, combined with the lack of regulations for the treatment and/or disposal of the waste in many developing countries, poses a significant risk to the future, both for the environment and the communities that rely on it.

#### 3.8.4.1 Legal Compliance

All waste disposal and recycling efforts must meet local legal requirements. This requirement applies to the use of officially authorized waste and recycling contractors in addition to a factory's own internal processes. Specific standards apply for wastes classified as hazardous waste.

Under no circumstances shall waste from PUMA suppliers or PUMA entities end up in illegal landfills, dumped into rivers, or burned illegally on factory premises or elsewhere.

#### 3.8.4.2 Targets

PUMA set a target of reducing production waste to landfill per unit products by at least 50% by 2025, compared to our baseline in 2020.

For the supply chain part, we design and launch an in-house tool for supply chain partners to set up their own target for climate change, water and waste. We also roll out training to the suppliers to guide them how to use it. The requirement is that the targets set by our suppliers need to be aligned with PUMA ambitious level at least and they are encouraged to go beyond. Some large volume suppliers are having upgraded targets to set up their own Science Based Targets for these listed domains.

#### 3.8.4.3 Guidelines – Solid (Non-Hazardous) Waste

For many phases associated with the production process, some generation of waste cannot be avoided, however the reduction of waste shall be considered a priority for all manufacturing steps. PUMA requires that all parties involved in producing its products take all measures possible to optimize environmental outcomes of the production process.

The following waste hierarchy provides an overview of options for treating and disposing of waste, in order of most desirable to least.

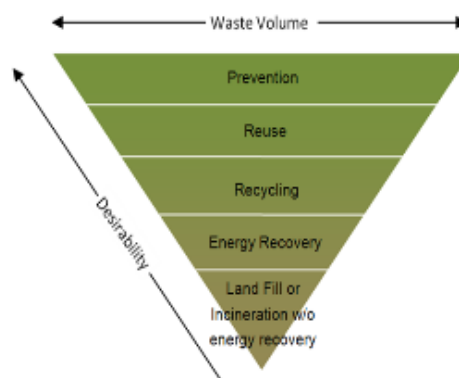


Figure 13: Waste Hierarchy

1. **Prevention:** improve manufacturing methods and influence consumers to demand greener products and less packaging, reducing the overall amount of waste requiring treatment and disposal.
2. **Reuse:** any operation by which products or components are saved after initial use and used again for the same purpose for which they were conceived.
3. **Recycling:** any recovery operation to reprocess waste materials into products, materials or substances that can be used in their original context, or for other purposes. Reuse includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

4. **Energy Recovery:** converts the energy from non-recyclable or reusable waste materials into useable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion, and landfill gas (“LFG”) recovery.
5. **Landfill or Incineration without Energy Recovery:** the least desirable method of waste treatment and shall be utilized only if none of the above possibilities are feasible. Whenever landfilling or incinerating waste materials, all relevant laws and regulations of applicable countries must be followed. PUMA requires that the disposal route of waste be comprehensively documented by official waste contracts or invoices.

#### 3.8.4.4 Hazardous Waste

Hazardous waste is defined as a special type of waste that cannot be disposed of by common means given its substantial, or potential, threat to public health and/or the environment. Hazardous waste can be found in gas, liquid or solid form. The United States Environmental Protection Agency (“EPA”) defines hazardous wastes as materials that are known or tested to be toxic, corrosive, flammable, or reactive.

Characteristics of various types of hazardous waste are defined below:

- **TOXIC:** Containing a concentration of certain substances that exceeds regulatory thresholds and/or are expected to cause injury or illness to human health or harm to the environment
- **CORROSIVE:** Acid waste (with a pH less than or equal to 2) or bases (with a pH greater than or equal to 12.5) that are capable of corroding metal containers such as storage tanks, drums and barrels (e.g. battery acid)
- **FLAMMABLE:** Flammable or ignitable waste can cause fire under certain conditions, spontaneously combust, or have a flash point less than 60°C (e.g. waste oil and used solvents)
- **REACTIVE:** Materials that are unstable under normal conditions and can cause explosions, toxic fumes, gases, or vapor when heated, compressed, or mixed with water (e.g. lithium-sulphur batteries and explosives)

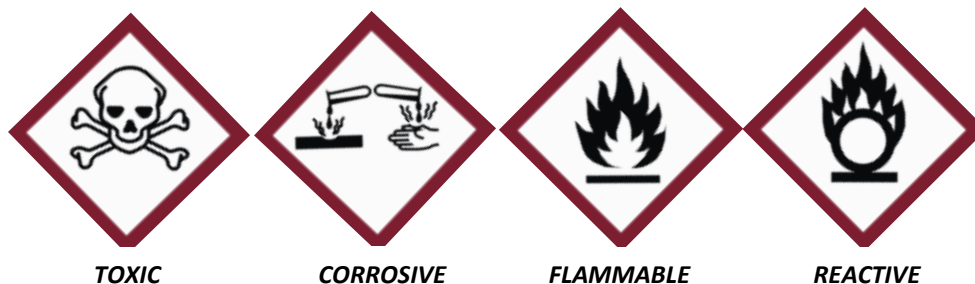


Figure 14: Labels from the globally harmonized system of classification

#### 3.8.4.5 Hazardous Waste Standards

PUMA **requires** all Factories to comply with all relevant local and international laws related to storage, handling, transport, and final disposal of hazardous waste. These may include:

- Registering the type and quantity of hazardous wastes generated from their operations
- Having trained personnel on-staff to handle the treatment and disposal of hazardous waste
- Having a legitimate and duly authorized hazardous waste transporter
- Having a legally authorized hazardous waste disposal and treatment facility

#### 3.8.4.6 Hazardous Waste Management Good Practices

Aleron Viet Nam Footwear Limited, a member of Huali Industrial Group, has set up a waste management hierarchy to achieve the group target. It includes six major levels of waste management: source reduction, in-house recycling, close loop, downcycling, energy recovery, landfill and incineration. Based on the hierarchy, Huali defines actions to achieve two target phases: 0% landfill and incineration at phase 1 and 100% reuse and recycle at phase 2.

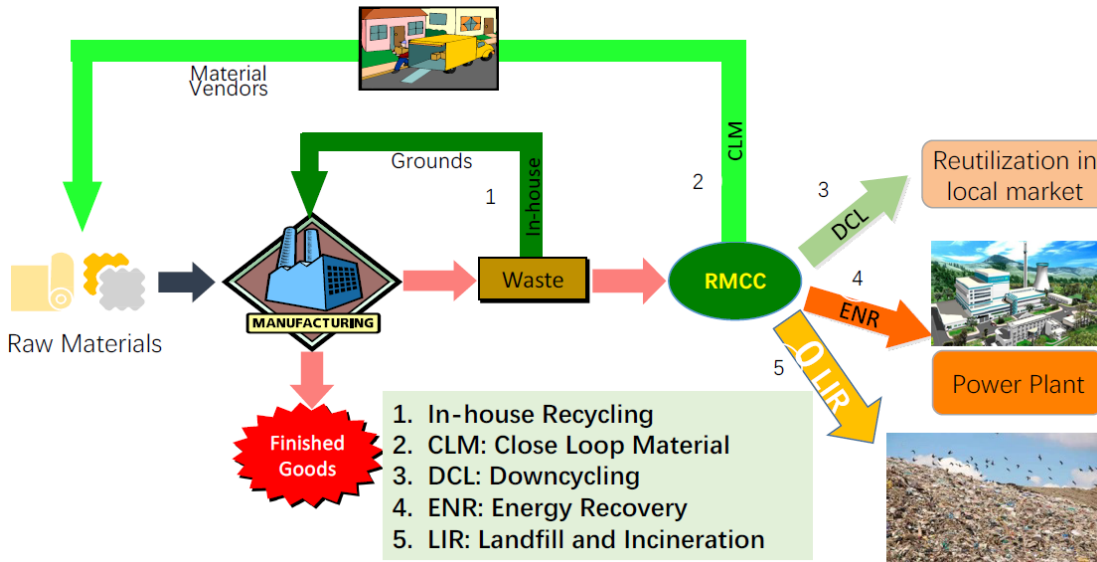


Figure 15: HUALI General Flowchart for Waste Disposal Stream

### 3.9 Factory Training & Capacity Building Projects

PUMA supports the development of its suppliers through capacity-building projects, which aim to improve social, environmental and chemical compliance and performance. This can be achieved through training with NGOs, labor expert organizations, the PUMA team, or related industry initiatives.

These projects are considered investments toward improving working conditions, environmental impact and mitigating risk of negative publicity. They are targeted to create positive impact within or even beyond the factory.

Suppliers may engage in these investments either jointly with PUMA or on their own. In some cases, such activities may be conducted by the supplier as a form of corrective action arising from an audit. In these circumstances, PUMA shall be given regular updates on the progress and results in keeping with the Corrective Action Plan in place.

PUMA encourages its employees and suppliers to optimize their use of natural resources (including energy, water, and raw materials) to improve the sustainability of their supply chains. Over the last several years, PUMA has initiated **capacity-building and consulting projects to help stakeholders achieve this aim**. These projects have included hosting training, conducting onsite assessments, introducing cleaner production technologies, and consulting with experts on other improvement methods. Examples of past and ongoing projects include

- CONSERV (2011-2013)
- SAVE (2013-2016)
- Vietnam Improvement Project or "VIP" (2017-2019)
- Partnership for Cleaner Textiles or "PaCT" (2019-2020)
- Clean by Design (2019- still in progress)
- Low Carbon Manufacturing Program (2019-still in progress)

and work with various operations with high environmental impact in the PUMA supply chain including those of Tier 1 suppliers, key Tier 2 factories such as fabric mills, PU mills and leather tanneries.



## **Sec. 4- PUMA's Environmental Policy**

We recognize that protecting our environment is an ongoing process. We strive to comply with local and international environmental legislations, be transparent with our stakeholders about the environmental impact of our work, and continuously improve our performance. Our Environmental Policy applies to all PUMA branches worldwide, and we request that our suppliers and service providers adhere to the same principles. Our Environmental Policy is comprised of five (5) key aims:

- 1. Ensure compliance with all legal regulations and enforcing the highest environmental standards,** both at PUMA and through our business partners.
- 2. Fully integrate PUMA's Environmental Policy into the Corporate Strategy aligned with key stakeholders.** Sustainability goals cannot be achieved by an individual department or brand alone, success in this area requires coordination and collaboration among all individuals and stakeholders to serve a common goal.
- 3. Identify 'win-win' solutions that serve both financial and environmental interests.** PUMA believes that meeting our 10FOR25 targets to reduce the consumption and use of energy and water, as well as for the emission of CO<sub>2</sub> and waste, will generate financial savings in the long term.
- 4. Communicate PUMA's Environmental Policy to different levels of our organization and main stakeholders.** We aim to effectively communicate to all PUMA employees and factory workers to raise awareness and enlist support in implementing them within all divisions and our core business partners. PUMA published four (4) environmental policies in 2021: Biodiversity & Forest Protection, Circularity, Occupational Health and Safety and Animal Welfare.
- 5. Strive for continuous improvement.** PUMA's 10FOR25 targets cover a wide range of sustainability topics including Human Rights, Climate Action, Circularity as well as Plastics and the Ocean. Our targets are aligned with the United Nations Sustainable development goals and ensure that PUMA works on making its core business more sustainable.

### **4.1 Policy Against the Use of Exotic Skins, Feathers and Mulesed Wool**

PUMA prohibits sourcing or processing raw materials from any endangered species recognized by the International Union for Conservation of Nature (IUCN). We also prohibit suppliers from using leather, hides and/or skins from animals that have been treated inhumanely, whether from the wild or from farms. PUMA does not and will not use any animal fur in any of its products.

In addition, the following listed items are prohibited from being included in any PUMA products:

- Furs, hides, or skins from exotic animals (e.g., crocodiles, snakes, ostrich, or fish)
- Downs and feathers that are plucked from living birds, including geese
- Merino wool from sources that practice wool removal through mulesing, regardless of the country of origin

For further information on endangered species, please see the [User's Guide to the IUCN Red List](#) and an overview of [CITIES](#) (The Convention on International Trade in Endangered Species of Wild Fauna and Flora).

### **4.2 Policy on Use of Cotton from Uzbekistan and Turkmenistan**

In recognition of PUMA's Human Rights Policy, PUMA bans Uzbek cotton completely and officially extends this ban to Turkmenistan. PUMA expects all suppliers to avoid sourcing cotton from these countries and comply with this cotton origin policy for all PUMA products.

### **4.3 Policy on the Use of Nanotechnology**

Given PUMA's goal of phasing out all hazardous substances and its commitment to the precautionary principle, we will not use any nanotechnology applications. Exceptions may exist where applications are analyzed and proved to have no potential negative impact on human health and the environment.



## 4.4 Policy on Biodiversity and Forest Protection

PUMA aims to reduce its impact on biodiversity through different actions, has developed targets and reports progress on sustainably sourced cotton, polyester, viscose, increased use of recycled materials, engagement in microfiber and biodegradability research, elimination of the use of hazardous chemicals, reducing waste and working towards a more circularity business.

PUMA monitors and make sure all the Leather, Viscose, Paper & Cardboard used in our production are from the responsible sources such as LWG, FSC and suppliers from the Canopy ranking with best sustainability performance.

## 4.5 Policy on Circularity

PUMA's drive towards circularity consists of multiple commitments throughout our value chain, including product design, production, transport, sale, consumption and end of life. PUMA takes actions on the below listed perspectives including:

- Increase the use of recycled materials
- Extend product life span in use
- Responsible for our product after use
- Scale up the use of renewable energy & water
- Eliminate hazardous chemical & landfill waste
- Scale up the use of bio-based and biodegradable
- Aim to regenerate natural system
- Inspire consumers and business partners on circularity

## 4.6 Policy on Animal Welfare

At PUMA, we care for the welfare of animals. We do not accept the use of animal products which originate from animals which have been inhumanely treated. Therefore, we aim at implementing high welfare and traceability standards. PUMA consults with Animal Protection Organizations on a regular basis to review our policy and actions.

- Good nutrition: Provide ready to access fresh water and a diet to maintain full health and vigor
- Good Environment: Provide suitable shade/shelter, good air quality and comfortable resting areas
- Good health: Prevent or rapidly diagnose and treat disease and injury, and foster good muscle tone, posture and cardiorespiratory function
- Appropriate behavior: Provide sufficient space, proper facilities, congenial company and appropriately varied conditions
- Positive mental experience: Provide safe, congenial and species-appropriate opportunities to have pleasurable experiences

## **Sec. 5 – Environmental Data Collection and Reporting**

PUMA uses Enablon, the environmental software tool, for the regular collection of environmental performance data from both owned entities and core suppliers. Data collection occurs annually and covers at least 80% of PUMA's sourcing business volume for both Tier 1 and Tier 2.

Each PUMA entity is accountable for its environmental performance. All PUMA offices, stores and warehouses are therefore required to regularly complete web-based questionnaires on the usage of energy, water, and paper, as well as the creation of solid waste and wastewater. This data also forms the basis for PUMA's internal management system regarding environmental performance, as well as the information presented in each Annual Report.

Given that the majority of PUMA's overall environmental footprint is created in the supply chain, PUMA includes all major Tier 1 and exemplary material suppliers into the regular data collection process. PUMA then uses this data to establish environmental key performance indicators ("E-KPIs") that align with production volume for each supplier, helping us track supplier improvements on energy and other resource consumption, as well as the creation of emissions and waste.

For more information on PUMA's data collection procedure, please contact the PUMA Sustainability Team (see Appendix B).

### **5.1 Global Reporting Initiative ("GRI") Sustainability Reporting**

PUMA has been publicly reporting its sustainability performance in accordance with the guidelines of the Global Reporting Initiative ("GRI") since 2004. Since 2010, PUMA's Sustainability and Financial Reporting have been integrated into the consolidated PUMA Annual and Sustainability report.

PUMA continues to encourage its core suppliers to publish sustainability reports that adhere to GRI guidelines to further transparent sustainability reporting across the supply chain.

*Please visit the PUMA website for a copy of our [Annual Report](#).*

### **5.2 Reporting of Environmental Key Performance Indicators ("E-KPIs")**

PUMA has established Environmental Key Performance Indicators to measure our progress and manage PUMA's environmental footprint. These E-KPIs track use of energy and water, as well as the generation of CO<sub>2</sub> and waste per unit of products, square meter of buildings used, financial turnover or per staff full time equivalent ("FTE").

PUMA and PUMA suppliers use the online platform Enablon for regular data collection from core suppliers, and to enable monitoring, tracking, and publishing of the E-KPI performance in PUMA's Annual Report. See figure below for PUMA's 2020 E-KPI performance compared to previous years:

**T.21 E-KPIS WASTE, PAPER AND WATER OF PUMA AND TIER 1 PRODUCTION**

	2020	2019	2018	2017	% Change 2019/2020	% Change 2017/2020
<b>Waste, paper, and water</b>						
Waste PUMA own entities (tons)	3,021	3,154	4,877	5,293	-4%	-43%
Recycled waste PUMA own entities (tons)	847	1,111	2,282	3,419	-24%	-75%
Recycled waste PUMA own entities (%)	28%	35%	47%	65%		
Waste from PUMA production (Tier 1 suppliers, tons)	23,498	24,205	16,682	14,686	-3%	60%
Percentage production waste to landfills (Tier 1)	9%					
Paper and cardboard consumption PUMA (tons)*	2,638	2,281	2,292	2,756	16%	-4%
Certified or recycled paper and cardboard consumption PUMA (tons)	1,848	1,818	1,120	2,025	2%	-9%
Percentage of certified or recycled paper consumption (%)	70%	80%	49%	74%		
Paper and cardboard consumption from PUMA production (shoe boxes, hangtags) (tons)	18,538	14,863	13,607	14,129	25%	31%
Percentage of certified or recycled paper and cardboard consumption from PUMA production (%)	99%	100%	98%	n/a		
Water PUMA own entities (m <sup>3</sup> )	96,569	95,291	89,676	106,397	1%	-9%
Water from PUMA production Tier 1 suppliers (k m <sup>3</sup> )	2,332	2,572	2,030	2,149	-9%	9%

\* Including paper bags, office paper, and cardboard consumption of offices, warehouses, and stores

1. Figures include PUMA-owned or -operated offices, warehouses, and stores.
2. Data includes extrapolations or estimations where no real data could be provided.
3. Includes own production sites in Argentina. All other production is outsourced to independent supplier factories, some warehouse operations are outsourced to independent logistic providers. Franchised stores are excluded.
4. Methodological changes over the last three years have influenced results.

Figure 16: PUMA's E-KPI Performance, 2020

**T.22 FOOTWEAR E-KPI RESULTS**

Summary of supplier e-KPIs	Weights				Change		Number of Suppliers
	2020	2019	2018	2017	2019-2020	2017-2020	
Value	2020	2019	2018	2017	2019-2020	2017-2020	Number of Suppliers
Energy/pair (kWh)	1.31	1.30	1.25	1.40	1%	-7%	22
CO <sub>2</sub> /pair (kg)	0.74	0.96	0.93	1.00	-23%	-26%	22
Water/pair (l)	15.08	15.21	12.30	14.50	-1%	4%	22
Waste/pair (g)	144.80	126.66	108.51	115.90	14%	25%	22
Waste to landfills/pair (g)	17						

**T.23 APPAREL E-KPI RESULTS**

Summary of supplier e-KPIs	Weights				Change		Number of Suppliers
	2020	2019	2018	2017	2019-2020	2017-2020	
Value	2020	2019	2018	2017	2019-2020	2017-2020	Number of Suppliers
Energy/piece (kWh)	0.56	0.57	0.57	0.72	-2%	-23%	21
CO <sub>2</sub> /piece (kg)	0.22	0.24	0.26	0.31	0%	-28%	21
Water/piece (l)	4.60	4.39	4.20	7.58	5%	-39%	21
Waste/piece (g)	54.27	56.33	46.50	44.00	-4%	23%	21
Waste to landfills/piece (g)	1.6						

➤ **T.24 LEATHER E-KPI RESULTS**

Summary of supplier e-KPIs	Weights				Change		Number of factories
	2020	2019	2018	2017	2019-2020	2017-2020	
Value							
Energy/m <sup>2</sup> (kWh)	7.0	8.2	8.7	9.1	-14%	-23%	6
CO <sub>2</sub> /m <sup>2</sup> (kg)	2.7	3.2	3.2	3.4	-15%	-20%	6
Water/m <sup>2</sup> (l)	68.3	74.7	90.2	91.8	-8%	-26%	6
Waste/m <sup>2</sup> (kg)	0.7	0.8	0.8	1.6	-13%	-56%	6

➤ **T.25 TEXTILES E-KPI RESULTS**

Summary of supplier e-KPIs	Weights				Change		Number of factories
	2020	2019	2018	2017	2019-2020	2017-2020	
Value							
Energy/t (kWh)	13,049.1	12,636.3	13,386.80	13,679.11	3%	-5%	21
CO <sub>2</sub> /t (t)	4.47	4.37	4.45	4.45	2%	0%	21
Water/t (m <sup>3</sup> )	103.4	105.5	122.78	119.30	-2%	-13%	21
Waste/t (kg)	78.9	62.08	70.63	299.59	27%	-74%	21

Figure 17: PUMA Supply Chain E-KPI Performance by Division, 2020

For more information about the results of the PUMA E-KPI data collection, please refer to PUMA's [Annual Financial and Sustainability Report](#).

## 5.3 Corporate Environment Profit & Loss Accounting

### RECOGNIZING THE VALUE OF ECOSERVICES

All business operations and supply chains depend on natural resources for ecosystem services such as fresh water, clean air, healthy biodiversity, and productive land.

At PUMA, we believe that healthy ecosystems are critical to the future of our business. We also recognize that we must be ethical, accountable, and responsible to our environment as we conduct our business activities.

We recognize that we must account for the **cost of natural resources** in our day-to-day business decisions. The establishment of PUMA's Environmental Profit and Loss Account ("EP&L") is our first attempt at measuring the immense value these services provide to a business, as well as the **true costs or impacts on nature by a business**.

Toward the end of 2009, we embarked on a journey to develop an enterprise and supply chain-wide view of our environmental impact in monetary terms. The PUMA EP&L measures and values both reductions in ecosystem services and increases in environmental impact due to PUMA's operational and supply chain activities.

- **Definition:** An Environmental Profit & Loss Account provides companies with a means of placing monetary value on the environmental impact along the entire supply chain of their business.
- **Profit:** Activities that benefit the environment.
- **Loss:** Activities that have an adverse environmental impact.
- **Environmental impact:** A change in the makeup, functioning, or appearance of the environment. Examples include:
  - Greenhouse gases ("GHGs"), which contribute to climate change, are associated with a range of environmental impacts such as reducing crop yields, changes in water availability and increases in extreme weather.
  - Waste disposal, including its leachate, can affect water courses, permeate local areas with unpleasant dust, noise, and odor, and create GHG emissions.

**TRANSPARENCY & COMMUNICATION**

Many audiences, both in our business and among our suppliers, are unfamiliar with the language of sustainability and may struggle to put figures such as 'metric tons of GHG emissions' and 'cubic meters of water' into context. As such, we chose to convert our environmental impact into monetary terms to make them digestible and meaningful to a wider audience.

Our EP&L will help us explore answers to the following:

- How can we help our employees, shareholders and suppliers understand the magnitude and importance of our impact on the environment?
- How can everyone in the business grasp the significance of the amount of CO<sub>2</sub> released, the impact of land conversion required to provide raw materials, or the volume of water consumed? How can this be factored into day-to-day decision making?
- How do our different environmental impacts compare to one another? Which are most significant?
- Where in our supply chain shall we focus our resources to reduce our overall impact?
- How can we help others understand the challenge of reducing our environmental impact, and the work we are doing to manage them?

By reporting the results of the EP&L, PUMA makes transparent the true scale of our environmental impact and enables clearer communication about their implications on people's lives, jobs, and environment. We believe this provides a basis for more meaningful, evidence-based engagement with our stakeholders.

**➔ G.13 EP&L RESULTS 2019**

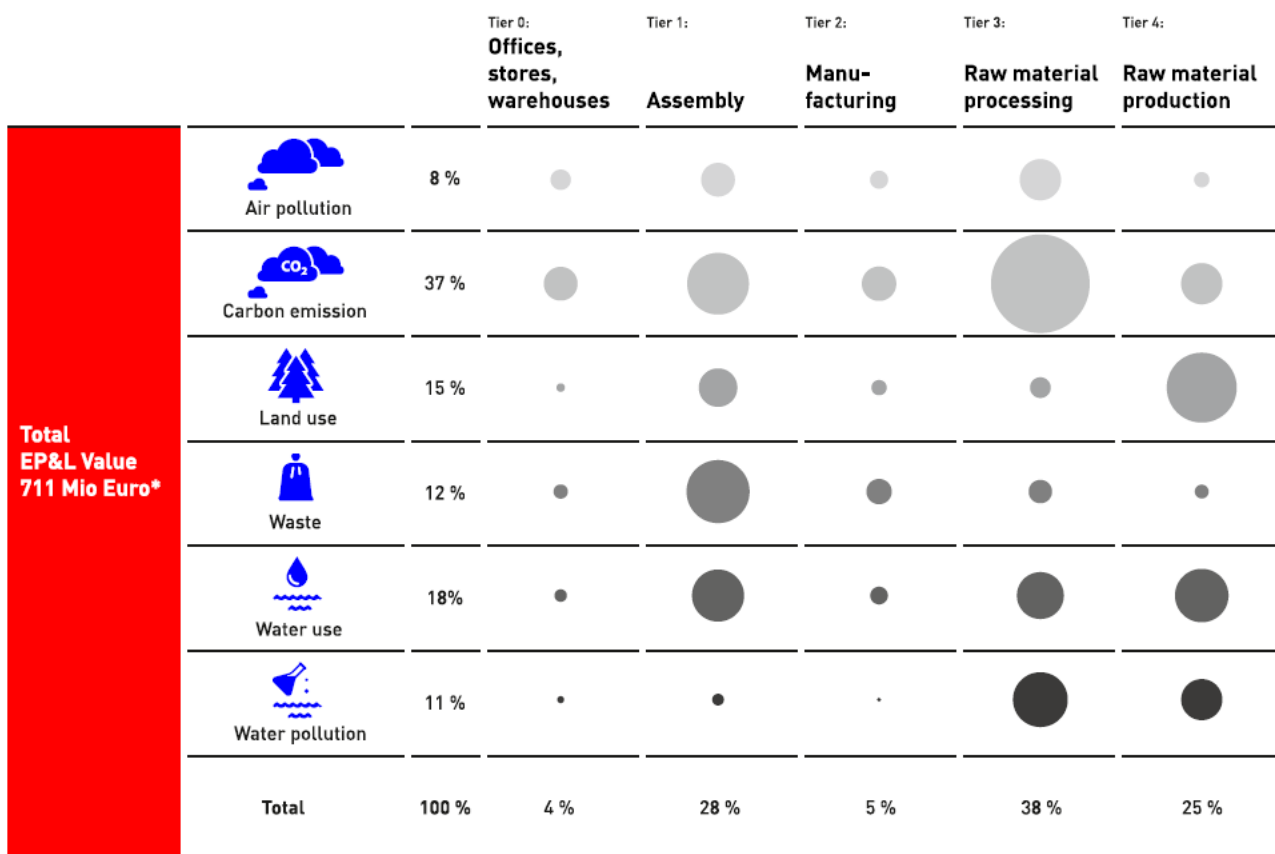


Figure 19: PUMA's Environmental Profit and Loss Account, 2019

**INFORMED BUSINESS DECISION-MAKING**

By placing a monetary value on our environmental impact with our EP&L, we can clearly quantify the impact of our activities, illuminate areas for improvement, and provide a roadmap for modes of reducing our footprint.

Ultimately, the EP&L will enable us to make better, more informed business decisions that account for our environmental impact alongside more traditional financial and operational considerations.

**SIGNIFICANT SOURCES OF ENVIRONMENTAL COSTS ARE IN THE SUPPLY CHAIN**

The results of our EP&L clearly show that the majority of the environmental impact of our work originates in our supply chain, particularly during the raw material stage. While PUMA has also published an EP&L for specific selected products and aims to release a corporate-level EP&L regularly going forward, the early results of this analysis clearly reinforce the need to focus on both processing (Tier 3) and raw material (Tier 4) stages of the supply chain.

**Tier 3** and **Tier 4** represent **63%** of all calculated costs to the environment (38% and 25%, respectively), while PUMA’s own operations (including transport of products from country of manufacture to selling markets) added up to only **4%** in 2017, representing a reduction from the year prior.

Please visit the PUMA website for the full report on PUMA’s [EP&L](#).

**Illustration of processes and impacts through PUMA’s supply chain**



Figure 20: PUMA Supply Chain Map used for the EP&L

## Sec. 6– Industry Collaboration

PUMA has placed a large emphasis on industry collaboration and, where possible, supporting existing industry initiatives. Collaboration with our peers is paramount to streamline the sustainability efforts of our industry. We believe that encouraging alignment of individual industry organizations, e.g., converging use of tools and processes, makes the overall system more efficient. Examples of actions PUMA has taken are:

- Harmonized the PUMA Compliance Audit tool with the methodology of FLA and Better Work;
- Actively roll out Higg Index Facility Environmental Module ("FEM") to monitor the core factories' environmental performance and use Zero Discharge of Hazardous Chemicals ("ZDHC") tools to manage the suppliers' chemical compliance.
- Supported a convergence of various existing supplier social compliance assessments under the umbrella of the Social and Labor Convergence Project ("SLCP"), and

- Introduced relevant social key performance indicators ("KPIs") as part of an industrywide framework on social standards that measure performance in addition to compliance

The results of these and similar coordinated efforts potentially free up resources currently spent by brands and suppliers alike. Examples of what we believe are redundant processes include:

- Multiple audits for the same factory
- Multiple test reports for hazardous chemicals on the same materials and effluents
- Multiple capacity-building and training projects focusing on similar subjects and suppliers

By no longer duplicating efforts across the industry, through brand collaborations we aim to use our own resources more effectively. This, in turn, achieves stable, long-term positive impact on our direct and indirect employees, as well as the factories, communities and environment in which we operate. Our new "10FOR25" targets will guide our work in this respect.

### 6.1 Sustainable Apparel Coalition



Figure 21: HIGG Index suite of tools

The Sustainable Apparel Coalition (SAC) is a global multi-stakeholder nonprofit alliance for the fashion industry. It's made up of more than 250 leading apparel, footwear and textile, brands, retailers, suppliers, service providers, trade associations, nonprofits, NGOs, and academic institutions working to reduce environmental impact and promote social justice throughout the global value chain. Leveraging the Higg Index suite of tools for the standardized measurement of value chain sustainability, the SAC is working to transform business for exponential impact.



Through multi-stakeholder engagement, the coalition seeks to lead the industry toward a shared vision of sustainability, built upon a common approach for measuring and evaluating the sustainability performance of apparel and footwear products. This seeks to illuminate priorities for action alongside opportunities for technological innovation.

PUMA became an active member of SAC in 2011 and remains actively engaged in working groups within the coalition, including those focused on environmental and social issues. Active membership in the SAC gives PUMA and PUMA's suppliers the opportunity to collaborate with industry peers toward the achievement of common goals. These goals are related to creating environmentally friendly products, improving production processes, and enhancing working standards within our global supply chains.

In 2012, the Sustainable Apparel Coalition launched the Higg Index, and in 2018, the Higg Index FEM (Facility Environmental Module) 3.0 has been rolled out to all suppliers.

Find more Information for SAC at <https://apparelcoalition.org/>

## 6.2 Fashion Industry Charter for Climate Action ("UNFCCC")

"To drive the fashion industry to net-zero Greenhouse Gas emissions no later than 2050 in line with keeping global warming below 1.5 degrees." --Mission of the Fashion Industry Charter for Climate Action

Under the auspices of UN Climate Change, fashion stakeholders worked during 2018 to identify ways in which the broader textile, clothing and fashion industry can move towards a holistic commitment on climate action. They created the Fashion Industry Charter for Climate Action, which contains the vision to achieve net-zero emissions by 2050. The Fashion Industry Charter was launched at COP24 in Katowice, Poland, in December 2018.

Under UN Climate Change, the signatories and supporting organizations of the charter have been working collaboratively to deliver on the principles enshrined in the document. This is being done through various working groups, which is bringing together relevant stakeholders, experts and initiatives in the fashion and broader textile sector.

The Fashion Industry Charter for Climate Action, with its working groups, is in the process of identifying and amplifying best practices, strengthening existing efforts, identifying and addressing gaps, facilitating and strengthening collaboration among relevant stakeholders, and joining resources and share tools to enable the sector to achieve its climate targets.

As one of the founding brands and active participants, PUMA engages in many topics and working groups, together with the other industry peers, to improve the impact of our supply chain, including setting up clear targets for supply chain carbon footprint reduction, the phase out of coal fired boilers, etc.

## 6.3 Fashion Pact

The Fashion Pact is a global coalition committed to positive change across the fashion industry with a common core of key environmental goals in three areas: stopping global warming, restoring biodiversity and protecting the oceans.

PUMA joined the Fashion Pact in 2019 and works with the other signatory brands to establish a roadmap towards a better environment.

## 6.4 Carbon Disclosure Project ("CDP")

CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action.

CDP runs the global environmental disclosure system. Each year, CDP supports thousands of companies, cities, states and regions to measure and manage their risks and opportunities on climate change, water security and deforestation. They do so at the request of their investors, purchasers and city stakeholders.



PUMA responds to CDP every year and fill in climate change, forest as well as the water security questionnaires. PUMA got a A- score for its responses regarding climate change 2021.

## 6.5 Textile Exchange

Textile Exchange is a global nonprofit that creates leaders in the preferred fiber and materials industry. In short, they build a community that can collectively accomplish what no individual or company can do alone. They develop, manage, and promote a suite of leading industry standards, as well as collect and publish critical industry data and insights that enable brands and retailers to measure, manage and track their use of preferred fiber and materials.

With a robust membership representing leading brands, retailers, and suppliers, Textile Exchange is positively impacting climate through accelerating the use of preferred fibers across the global textile industry.

PUMA contributes to the Textile Exchange preferred fiber and materials campaign every year with our consumption data and strategy regarding the more sustainable materials in our products. PUMA also uses the Textile Exchange certification to ensure the traceability of recycled contents, more sustainable downs and wool.

## 6.6 German Corporation for International Cooperation ("GIZ")

GIZ is a German development agency that provides services in the field of international development cooperation and international education work. GIZ's main commissioning party is Germany's Federal Ministry for Economic Cooperation and Development (BMZ). Other commissioners include European Union institutions, the United Nations, the private sector, and governments of other countries. In its projects, GIZ works with partners in national governments, actors from the private sector, civil society and research institutions. It is the organization's self-declared goal to deliver effective solutions that offer people better prospects and sustainably improve their living conditions.

GIZ is a close partner for many industry peers with PUMA. They provide opportunities for our suppliers to improve carbon footprints, water efficiency, better disposal of waste, chemical management, renewable energy, etc. PUMA has long term relationship working with GIZ on many topics and different projects in Vietnam, China, Bangladesh and other regions under the coverage.

## 6.7 Institute of Public and Environmental Affairs ("IPE")

The Institute of Public and Environmental Affairs ("IPE") is a registered non-profit organization based in Beijing, and suppliers based in China must adhere to their reporting policies. Since its establishment in May 2006, the IPE has developed a database to monitor corporate environmental performance and pollution. The IPE's aim is to expand environmental information disclosure and allow communities that harbor manufacturing facilities to fully understand the hazards and risks in the surrounding environment, promoting enhanced public participation in environmental governance.

Every year, IPE conducts evaluation of nearly 600 brands' green supply chain practices in China using the Green Supply Chain CITI Evaluation, co-developed by IPE and the Natural Resources Defense Council (NRDC) in 2014. CITI assesses brand performance on matters such as public engagement and responsiveness, requirements for supplier compliance and corrective action, environmental data disclosure and transparency. In 2021, IPE introduced Climate Action Transparency Index (CATI) to assess brands' efforts to identify carbon hotspots across its Scope 1, 2 and 3 emissions, set reduction targets, disclose relevant carbon data to verify the progress. To assist brands to reduce pollution and greenhouse gas from their supply chain, IPE developed Pollutant Release and Transfer Registry (PRTR) in 2013, which allows suppliers in China to publicly disclose both conventional and hazardous pollutants as well as their greenhouse gas emissions. PUMA therefore requires those suppliers based in Mainland China to adhere to the following reporting policies:

- Track their own and their major suppliers' (include but not limit to material suppliers with high environmental impact, chemical suppliers, hazardous waste contractors, central municipal wastewater treatment plants, etc.) environmental performance on IPE's platform (via website or app) on a regular basis, quarterly or shorter. Realtime monitoring is preferred. In the case of any violations occurring in the past 24 months, the factory shall communicate with IPE to report follow-up actions

- Publish their environmental KPIs and other relevant data (e.g., reduction targets) on IPE's RPTR platform as requested by PUMA

Global suppliers are required to report detox information on IPE's detox platform as requested by PUMA.

For more information about IPE and its CITI/CATI index please visit the IPE [website](#).

## 6.8 Apparel Impact Institute ("Aii")

The Apparel Impact Institute is curating partnerships with industry and other professional services to scale proven impact initiatives, accelerating apparel supply chain solutions that address the most urgent sustainability needs. Their most famous project Clean by Design was approved by PUMA and rolled out to our supply chain in regions where Aii could support, for both Tier 1 and Tier 2, starting with Greater China and Vietnam. PUMA and our suppliers have experienced expert technical training and advice to further improve energy efficiency provided by Aii team. It is also an industry-wide accepted project where some of our core suppliers were engaged because they were invited by other brands. It is an excellent example of the cooperation of the whole industry.

## 6.9 World Wildlife Fund ("WWF")

WWF is an independent conservation organization active in nearly 100 countries, working to sustain the natural world for the benefit of people and wildlife. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

PUMA works with WWF on many projects regarding climate change and water footprints to help our suppliers perform better and reduce their environmental impact, including the Low Carbon Manufacturing Program ("LCMP").

## 6.10 World Resource Institute ("WRI")

WRI is a global research organization that works with governments, businesses, multilateral institutions and civil society groups to develop practical solutions that improve people's lives and protect nature. They organize our work around seven global challenges: Food, Forests, Water, Energy, Climate, the Ocean and Cities. WRI analyzes these issues through the lenses of our four Centers of Excellence: Business, Economics, Finance and Equity.

WRI is also an important partner of CDP and the Science-Based Target Initiative. The PUMA SBT was checked and approved by WRI.

PUMA works with WRI to provide Climate Change related training and projects in Mexico and other regions, for the capacity building of suppliers and internal teams on how to reach the ambitious climate change target.

## 6.11 International Finance Corporation ("IFC")

The IFC is an international financial institution that offers investment, advisory, and asset-management services to encourage private-sector development in less developed countries. The IFC is a member of the World Bank Group.

IFC provides sustainability projects for the industry to engage our supply chain on resource efficiency optimization, including energy, water and waste. PUMA has cooperated with the IFC since 2015, starting with the S.A.F.E. project in China and the VIP project in Vietnam. Now we are close partners for the PaCT project, which is continuing in Bangladesh.

Collaborating with both organizations, PUMA launches different collections with various more sustainable materials or technologies, with full traceability and transparency. On top of it, PUMA created lighthouse stories for sustainability.

## **Sec. 7 – More Sustainable Products**

### **7.1 Commitments to Utilize More Sustainable Materials**

We focus on the sustainability performance of the materials from which our products are made. Over half of PUMA's environmental impact occurs in the production process of our main raw materials, such as polyester, cotton and leather. To tackle this issue head on, we have set ambitious targets to be fulfilled. Until 2025, 100% of our cotton, polyester, leather and down feathers as well as paper and cardboard should come from more sustainable sources.

#### **7.1.1 BCI**

The Better Cotton Initiative ("BCI") is a not-for-profit organization stewarding the global standards for 'Better Cotton,' and bringing together cotton's complex supply chain, from the farmers to the retailers. BCI "exists to make global cotton production better for the people who produce it; better for the environment it grows in; and better for the sector's future, by developing Better Cotton as a sustainable mainstream commodity."

PUMA has been a member of the BCI since January 2016. In line with PUMA's sustainability targets, we aim to source 100% of our cotton from either BCI or equivalent standards, recycled or organic sources by 2025.

*For further information, please visit BCI's [website](#).*

#### **7.1.2 Bluesign®**

The Bluesign® system seeks to be a "solution for sustainable textile production" by guaranteeing that a safely manufactured product has been manufactured using sustainable materials and a clean process. Bluesign® partners within the textile industry manage the natural resources used in their process soundly and responsibly to reduce water and air emissions, improve wastewater treatment and generally reduce their ecological footprint. With this integrated approach, the Bluesign® system unites all partners of the textile industry in working toward environmentally friendly, sustainable textile production worldwide.

Within our strategy to focus on more sustainable raw materials, we have set the target of achieving 100% Bluesign®- and Oeko-tex-approved or recycled polyester materials in our product range by 2025.

*For further information on Bluesign®, please visit its [website](#).*

#### **7.1.3 Oeko-tex**

The STANDARD 100 by OEKO-TEX® is a worldwide, consistent and independent testing and certification system for raw, semi-finished, and finished textile products at all processing levels, as well as accessory materials used. The OEKO-TEX® Standard 100 contributes to high and effective product safety from a consumer's point of view.

*For more information on Oeko-tex, please visit its [website](#).*

#### **7.1.4 Leather Working Group**

The Leather Working Group ("LWG") was formed in April 2005 to promote sustainable and appropriate environmental stewardship practices within the leather industry. The LWG created a set of protocols to assess the compliance and environmental stewardship practices of leather manufacturers. The LWG certification for tanneries is an award of a bronze, silver, and gold rating, as well as a classification (A, B, etc.) for leather traceability. This multi-stakeholder initiative aims to develop and support a procedure for assessing the environmental compliance of potential tanneries, and to promote sustainable environmental business within the tanning industry.

PUMA emphasized its commitment to sustainably produced leather by setting a target of sourcing 90% from LWG-certified tanneries. We achieved this target in 2015. PUMA continues to source leather almost exclusively from LWG-certified tanneries and, over time, aims to increase its proportion of leather with a traceability grading of A or B.

*For further information on the LWG, please visit its [website](#).*

### 7.1.5 FSC®

The Forest Stewardship Council (FSC®) sets standards for responsible forest management and uses the power of the marketplace to protect forests for future generations. To ensure forests are responsibly managed, FSC® evaluates sources of wood products against 10 principles and 57 criteria. FSC® ensures that waterways and wildlife habitat and species are protected in the sourcing of certified wood, and that high-conservation value forests (as well as those containing rare or threatened ecosystems) are preserved. Industry participation in the FSC® is voluntary.

PUMA has chosen to uphold high environmental standards by ensuring our standard shoebox is made from over 95% recycled and fully FSC®-certified or recycled paper and cardboard material.

For further information on the FSC®, please visit its [website](#).

### 7.1.6 Water-Based Polyurethane

*Water-based polyurethane (PU) is a new raw material for producing synthetic leather. Compared to the conventional PU, the water-based PU does not need solvent during its production process and is therefore friendlier to human health and the environment.*

PUMA has participated in projects to promote the use of water-based PU in its supply chain within the framework of ZDHC.

### 7.1.7 Responsible Down Feathers

*The RDS ensures that independent, third-party assessment of all aspects of animal rearing and handling, as well as chain of custody through the entire supply chain, will help to improve the welfare of animals and, at the same time, provide retailers and consumers alike with greater confidence in responsible sourcing.*

In 2018, PUMA set a new sustainable material target to increase the use of Responsible Downs in its supply chain to 100% in 2020 and going forward.

More information on the RDS may be found on its [website](#).

### 7.1.8 Biobased Materials

*Bio-based products or materials derived from plants and other renewable agricultural, marine, and forestry materials. Bio-based products or material generally provide an alternative to conventional petroleum derived products and help to reduce GHG emissions.*

For blend component/material/plant-dye, we require an ASTM D6866 test report with the actual percent biobased.  $\geq$  20% bio-based feedstock (% of carbon from “natural” (plant or animal by-product) sources versus “synthetic”). An MSDS of the dye is required for plant dye.

100% bio-based component/material, should be certified biobased by US Department of Agriculture (USDA) BioPreferred® BioPreferred | Catalog

To communicate any environmental benefit other than “natural material/dye” we require a Life Cycle Assessment

The material from agriculture must originate from a waste stream (a by-product). The farm should be certified Bonsucro or ISCC.

### 7.1.9 Organic

*Organic cotton is produced without the use of harmful and toxic chemicals like synthetic fertilizers or pesticides. Cultivation is in line with the guidelines of organic farming*

In line with PUMA's sustainability targets, we aim to source 100% of our cotton from either BCI or an equivalent standard, recycled or organic sources by 2025. To ensure traceability, we require the full supply chain producing for organic products to be equipped with a Global Organic Textile Standard (GOTS) certification. The production sites and

related trading units need to be covered with Scope Certificates and every single shipment has to be covered by transaction certificates.

#### **7.1.10 Vegan**

*Vegan products are those which forbid the use of any materials of animal origin in whole or in part or produced with the aid of auxiliary materials of animal origin*

PUMA uses certification via the V-Label to make sure the suppliers are approved and we ensure that products traditionally made from animal-derived materials (e.g. bags or shoes) are 100 % free of any animal product.

#### **7.1.11 Dope Dye**

*Dope Dye technology reduces the use of water, heat and thus CO<sub>2</sub> emissions compared with the traditional dyeing process*

PUMA has used Dope Dye for some years and started using it on a large scale for Apparel and Accessories products in 2021.

#### **7.1.12 Recycled materials**

*We use recycled materials to improve our environmental footprint and move towards a circular economy*

To ensure traceability, we work with Textile Exchange and require the full supply chain producing recycled products to be equipped with Global Recycled Standard (GRS) or Recycled Claim Standard (RCS) certifications. The production sites and related trading units need to be covered with scope certificates and every single shipment has to be covered by transaction certificates. We also ensure that the products have at least 20% recycled content by weight.

#### **7.1.13 Chrome-Free Leather**

*Chrome-free leather is treated with tannins that do not contain chromium. If not managed correctly, chrome can get into the local water supply, producing soil erosion and may cause health problems for people living in the surrounding area.*

Sourcing leather from certified tanneries as per Leather Standard by Oeko-Tex OR leather test report is required as per ISO 15115 (2019) standards for chrome-free tanned leather. Total content of Chromium  $\leq$  0.1% on dry weight.

All leather in footwear should be chromium free.

#### **7.1.14 Lyocell- Modal**

*Fibers are extracted from sustainably grown wood.*

PUMA sources Lyocell Modal which has earned US Department of Agriculture (USDA) BioPreferred® designation.

[BioPreferred|Catalog](#)

PUMA sources from raw material suppliers which have low risk of sourcing from ancient and endangered forests.

***See next page.***

# APPENDIX

## A. The PUMA Code of Conduct

PUMA SE, PUMA WAY 1, D-91074 Herzogenaurach

FOREVER FASTER PUMA 

# CODE OF CONDUCT

**PUMA respects Human Rights. This respect defines our engagement with the societies in which we operate, and with our partners throughout our supply chain. PUMA respects the environment. We are determined to manage, reduce and report on the impact on the environment of both our organization and our supply chain.**

**These two commitments are expressed publicly and transparently in the PUMA Code of Conduct. All our Employees, Vendors and their Subcontractors are required to comply in full with this Code of Conduct. Where differences or conflicts arise, the highest standard shall apply.**

### EMPLOYMENT RELATIONSHIP

Vendors and their subcontractors shall adopt and adhere to rules and conditions of employment that respect workers, and, at a minimum, safeguard their rights under national and international labor and social security laws and regulations.

### NO CHILD LABOR

Vendors and their subcontractors may not employ anyone below 15 years of age, or the local legal minimum age, or the age for completing compulsory education, whichever of the three is higher.

### SAFE WORKING ENVIRONMENT

Vendors and their subcontractors must provide a safe and hygienic working environment for all employees. Vendors and their subcontractors must take all possible precautions to prevent accidents at the workplace, and should actively promote good occupational health and safety practices.

### FREEDOM OF ASSOCIATION & COLLECTIVE BARGAINING

Vendors and their subcontractors must guarantee the right of their employees to join unions, or other work or industry related associations, and to bargain collectively. These rights must be given without fear of harassment, interference or retaliation.

### NO DISCRIMINATION

Vendors and their subcontractors do not discriminate against any of their employees. Employees are treated with respect and equality regardless of religion, age, gender, pregnancy, marital status, disability, nationality, race, ethnic origin, political views or sexual orientation.

### ETHICAL BUSINESS PRACTICES

PUMA SE will not tolerate corruption neither in the supply chain nor in its own operations.

### DIGNITY AND RESPECT

Harassment, corporal punishment and physical, sexual, psychological or verbal abuse is not tolerated in the PUMA supply chain. Vendors and their subcontractors cannot use any form of forced labor including prison labor, indentured labor or bonded labor.

### FAIR COMPENSATION






Every worker has a right to compensation for a regular work week that is sufficient to meet the worker's basic needs and provide some discretionary income. Employers shall pay at least the minimum wage or the appropriate prevailing wage, whichever is higher, comply with all legal requirements on wages, and provide any other benefits required by law or contract. Where compensation does not meet workers' basic needs and provide some discretionary income, each employer shall work with their relevant stakeholders to take appropriate actions that seek to progressively reach a level of compensation that does.

### NO EXCESSIVE WORKING HOURS

Vendors and their subcontractors employees must not be obliged to work in excess of the regular workweek and maximum overtime allowed by local labor law. A regular workweek shall not exceed 48 hours and one day off shall be guaranteed for every seven-day period. Other than in exceptional circumstances, the sum of regular and overtime hours in a week shall not exceed 60 hours. Overtime shall be voluntary and compensated at a premium rate and not be requested on a regular basis.

### RESPECT THE ENVIRONMENT

Vendors and their subcontractors must respect local environmental protection legislation or international industry standards, whichever is higher. All Vendors and their subcontractors must measure and progressively reduce their impact on the environment.

REGION	TELEPHONE	LANGUAGES
Southeast Asia	+84 989385612 +628 11 227 2143	
South Asia	+880 1708469256	
East Asia	+86 13622884924	
Americas	+503 77871132	
Europe, Middle East & Africa	+49 15114743876 +90 532 483 6685	

Vendors and their subcontractors accept that their business practices are subject to scrutiny. All subcontractors must be authorized by PUMA and it is the responsibility of the vendor to ensure that this Code of Conduct is respected at their subcontractors.

PUMA SE reserves the right to cease trading with any company which is found to violate this Code of Conduct.

Please direct all enquires, complaints and suggestions regarding this code and its implementation to [sustain@puma.com](mailto:sustain@puma.com) or contact your local PUMA Sustainability Team.

V. 06. 2016



B. The PUMA Code of Ethic

# PUMA PRINCIPLES

It is great to have a set of values that guide the way we conduct our day to day business. However, you may ask yourself how all of this applies to you.

Find on the next pages the guiding principles of how we behave and make decisions at PUMA. We will discuss the tricky positions you can find yourself in, in which the correct behavior does not seem so clear. The Q&As will help you understand such situations.

**Remember in case of doubt there is always someone you can speak to at PUMA.**

As a PUMA employee you also have to comply with mandatory internal policies for specific risk areas. These internal policies and the **Code of Ethics** exist to protect both you and PUMA's reputation and goodwill.

As a manager you have to make sure everybody in your team understands these rules and sticks to them.

We want everybody to be attentive, to look closer and to speak up whenever the principles are being violated.



PRINCIPLE 1 — HUMAN RIGHTS

## WE TREAT EVERYONE WITH FAIRNESS AND RESPECT.



**We want you to be you when you come to work!**

The people who work at PUMA come from many backgrounds and nationalities. Our differences make us stronger. We want a diverse workforce and we do not tolerate discrimination, harassment or bullying in any form. We know that the colour of your skin, your gender, age, who you love, how you worship or how you self-identify does not affect your ability to do your job. We always come from a place of openness and respect.

PRINCIPLE 3 — LEARN FROM MISTAKES

## WE TAKE RESPONSIBILITY FOR OUR ACTIONS AND OWN UP TO OUR MISTAKES.



**At PUMA, we employ humans, not robots.**

Every now and then mistakes happen. Own up to your mistakes and do not try to cover them up. We see mistakes as learning opportunities.

PRINCIPLE 5 — PROTECTION OF PUMA ASSETS

## WE USE PUMA ASSETS RESPONSIBLY.

As part of your job, you may be given a laptop, a company car or some other tool to make sure you can perform properly. Also, for example during 360 we give you access to many new products.

We expect you to treat these assets with care and respect. Do not steal, waste or misuse them.

Use your common sense when using PUMA assets and make sure you keep them safe.



PRINCIPLE 2 — HEALTH & SAFETY

## WE PROVIDE A SAFE WORK ENVIRONMENT FOR OUR EMPLOYEES.



**You should be able to go to work without fear of injuring yourself or getting sick.**

We do not cut corners or look for ways to save when it comes to health and safety.

In fact, we are investing more in these areas to ensure you have a safe, healthy environment so you can do your job to the best of your ability.

PRINCIPLE 4 — INTELLECTUAL PROPERTY

## WE RESPECT INTELLECTUAL PROPERTY — OURS AND OTHERS'.



Our designers and developers come up with creative and innovative ideas that make us a successful and competitive brand.

**Our logo is one of our most valuable assets.**

That is why we make sure we protect PUMA's intellectual property. We show the same respect and care for trademarks, patents and designs owned by others. We only use the intellectual property of others if we have the permission or the license to do so.

PRINCIPLE 6 — SUSTAINABILITY

## WE WORK TOWARDS A SUSTAINABLE FUTURE.

**We only have one planet so we have to take care of it.**

Sustainability means ensuring that our success does not exploit our suppliers' workers nor our own staff, our natural resources or our investments.

We reject any violation of human rights by suppliers, and any form of forced

labor, and exploitative child labor or discrimination in any form.

It is important for us that our suppliers give a fair day's pay for a fair day's work.

We expect our suppliers to adhere to regulations about minimum working age and minimum wage.

PRINCIPLE 7 – QUALITY & SAFETY

## WE MAKE SAFE PRODUCTS.

**At PUMA, we take pride in our work.** We make innovative, high-quality products for athletes of all levels, across the globe.

When someone buys a PUMA product, they can expect that they or the people they care about are not put at risk and neither are the people who produce it. Therefore, we ensure that our products are designed and produced in compliance with applicable safety and trade compliance standards.



PRINCIPLE 8 – SELECTION OF BUSINESS PARTNERS

## WE SELECT OUR BUSINESS PARTNERS CAREFULLY.



**We can only achieve our goal of becoming the fastest sports brand in the world if we work with the best business partners available.**

This is why we carefully select third party business partners based on objective criteria. Favoritism and nepotism have no place at PUMA. We expect our business partners, especially our sourcing partners, to respect human rights, to know the rules by which we play and ask them to adhere to the values we have set out in our Code of Conduct for suppliers.

PRINCIPLE 9 – CONFLICTS OF INTEREST

## WE ACT WITH PUMA'S BEST INTEREST AT HEART.

**A conflict of interest can arise** when you are somehow personally invested (financially, genetically, romantically) in a business decision.

We cannot avoid all conflicts of interest, but we can take steps to ensure we always act objectively and without bias. We do this by disclosing and managing potential and existing conflicts of interest. This way we make objective decisions which benefit PUMA as a whole and not only us as individuals.



PRINCIPLE 10 – INSIDER TRADING

## WE DO NOT USE INSIDE INFORMATION OUTSIDE OF THE COMPANY.



**PUMA is a listed company.**

Therefore, we comply with capital markets law. Working at PUMA means you may have access to inside information about the company. Inside information is not only a confidential information but could, if made public, affect an investor's decision to buy or sell PUMA shares thus affecting the market price of the PUMA share.

Inside information can include information about sales, earnings or other important financial performance figures, significant transactions, changes in key personnel or the entry into a new market.

Using inside information for your own gain, be it personal or business, or for recommending to another person to buy or sell PUMA shares creates an uneven playing field. More importantly, it's illegal and can lead to serious criminal and civil penalties and fines for you and PUMA.

PRINCIPLE 11 – ANTI-MONEY-LAUNDERING

## WE PREVENT MONEY LAUNDERING.



If someone were to receive money illegally, that money would need to be 'laundered' before it can be put into the financial system and spent. Money laundering means falsifying or disguising where that money came from, then returning it to the criminal. There are many ways this can be done, such as with shell companies, large cash payments or through elaborate transfers.

PUMA takes a strong stance against money laundering and takes active steps to ensure our payment channels cannot be used for illegal activities.

**Stay alert!** It's important that you speak up if you see anything suspicious.

Red flags can include:

- » Transfer payment to or from entities or countries not related to the transaction
- » Process a transaction in a way that circumvents the normal process
- » Payments in cash.

PRINCIPLE 12 – TRADE COMPLIANCE

## WE COMPLY WITH NATIONAL & INTERNATIONAL TRADE LAWS.

**We have fantastic products and it is no surprise that customers around the globe love them and want access to them.**

We are committed to complying with import and customs law, export controls, economic sanctions, denied parties lists etc.

For example, we will not conduct business with persons or companies that are subject to any type of trade embargoes, economic

sanctions or other official restricted lists.

Make sure you engage our Trade Compliance Team to review movements of our products across international borders before they take place. All activities, especially contracts, involving sanctioned countries must be reviewed by the legal and compliance departments.

PRINCIPLE 13 – COMPETITION

## WE COMPETE FAIRLY.



**Winning from an unfair advantage is not winning.**

We are successful because we work hard and play by the rules. PUMA is committed to ensuring a level playing field and fair and equal conditions for competition. This is not just about protecting our reputation and avoiding lawsuits, but about benefitting our customers and business partners: competition creates more choice, lower prices and higher-quality products for consumers.

Antitrust laws regulate anti-competitive behavior between businesses. These laws prohibit discussions, agreements and understandings among actual or potential competitors regarding price or restriction of market, boycotting certain suppliers or customers.

We do not condone behavior that violates antitrust laws.

PRINCIPLE 14 – ANTI-CORRUPTION

## WE CANNOT BE BOUGHT AND WE DO NOT OFFER BRIBES.

When we win, in life and in business, we want to do so on merit.

When we lose, we want it to be because our competitors were better, not because they paid a bribe.

**PUMA does not accept and does not offer bribes in any way, shape or form.**

**PUMA does not make donations or other contributions to political parties, politicians or related institutions.**



PRINCIPLE 15 – FINANCIAL INTEGRITY

## WE KEEP ACCURATE RECORDS.



**Bookkeeping isn't just a fun word** with three consecutive repeated letters (one of only three in the whole English language), it is the supportive insole in the shoes of any company.

We keep complete, accurate, timely and understandable records to give a fair and complete view on PUMA's performance and to help us do business.

We do not make false statements, misleading entries, material omissions in any of PUMA's books, financial records, personnel records and systems.

PRINCIPLE 16 – TAX COMPLIANCE

## WE PAY OUR FAIR SHARE

**PUMA respects all tax laws and international standards in all countries where we operate.**

We aim to be a good corporate citizen and pay in full all local and national taxes as required by the law.

Details are stipulated in the PUMA Group Tax Guideline.



PRINCIPLE 17 – CONFIDENTIALITY

## **WE PROTECT CONFIDENTIAL INFORMATION.**



**As a PUMA employee you have access to a lot of information that could be valuable to our competitors.**

Information about new sponsorship deals, the latest sales figures, new designs or patents could hurt PUMA if it ended up in the wrong hands. Do keep PUMA's confidential business information and the one of our business partners to yourself.

In addition, we invest a lot in technical solutions to prevent cyber criminals from disrupting our business.

PRINCIPLE 18 – DATA PRIVACY

## **WE PROTECT PERSONAL INFORMATION.**



**Employees, customers and business partners share personal data with us.**

When you give us your information, you establish a trust relationship with us, and we take this relationship very seriously.

We protect the data entrusted to us by handling it properly, using it only for the intended and authorized purposes, and considering the full rights of the data owner at all times.

# **SPEAK UP. REACH OUT. PLAY FAIR.**

We have now explained the guiding principles of how we behave and make decisions at PUMA.

If you notice any behavior or actions you feel go against those principles, we want you to speak up. You are the best asset we have to ensure a level playing field for PUMA and its competitors: you are on the ground, you deal with these issues every day and you are in the best position to speak up and let us know if we have missed something.

**It's not easy, but it's important.**

Sharing a suspicion about your colleagues can be tough. You may feel you are betraying their confidence by doing so. But ignoring unethical or inappropriate behavior only serves to make the problem worse, while doing nothing to fix it.

If someone gets away with something once, they are more likely to do it again. If you are in doubt, it is always better to ask for advice than to ignore it. Clear and open communication is the quickest way to conflict resolution.

For the full version, please see PUMA FOREVER BETTER website: [PUMA Code of Ethics](#)

## C. Contacts

If you have any questions or need additional information, please contact us. Below are main PUMA contacts by relevant areas:

Waste Water Testing and Guidance, IPE Platform, Environmental Audits	Mr. Andrew Li Mr. Archak Pattanaik	<a href="mailto:andrew.li@puma.com">andrew.li@puma.com</a> <a href="mailto:archak.pattanaik@puma.com">archak.pattanaik@puma.com</a>
ZDHC, MRSL	Mr. Archak Pattanaik	<a href="mailto:archak.pattanaik@puma.com">archak.pattanaik@puma.com</a>
Better Cotton Initiative	Mr. Archak Pattanaik	<a href="mailto:archak.pattanaik@puma.com">archak.pattanaik@puma.com</a>
Enablon, Higg Index, sustainability project	Mr. Archak Pattanaik	<a href="mailto:archak.pattanaik@puma.com">archak.pattanaik@puma.com</a>
China, East Asia topics	Mr. Andrew Li	<a href="mailto:andrew.li@puma.com">andrew.li@puma.com</a>
Vietnam, Cambodia topics	Ms. May Dang (APP ACC) Mr. Chinh Nguyen (FTW)	<a href="mailto:may.dang@puma.com">may.dang@puma.com</a> <a href="mailto:chinh.nguyen@puma.com">chinh.nguyen@puma.com</a>
South Asia, South East Asia topics	Mr. Shohan Mohammad Wasiuzzaman	<a href="mailto:mohammadwasiuzzaman.shohan@puma.com">mohammadwasiuzzaman.shohan@puma.com</a>
LATAM topics	Mr. Gerardo Pinero	<a href="mailto:gerardo.pinero@puma.com">gerardo.pinero@puma.com</a>
PUMA RSL Database, Restricted Substances List, AFIRM, RSL Remediation Procedure	Mr. Edelberto Anit Mr. Aaron Shum	<a href="mailto:edelberto.anit@puma.com">edelberto.anit@puma.com</a> <a href="mailto:aaron.shum@puma.com">aaron.shum@puma.com</a>

In case of any other questions regarding this manual,

For supply chain topics, please contact the PUMA Supply Chain Sustainability Team at:

Ms. Veronique Rochet  
Senior Head of Sustainability  
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## D. UN Global Compact Principles

### **THE TEN PRINCIPLES**

The UN Global Compact's ten principles in the areas of human rights, labor, the environment and anti-corruption enjoy universal consensus and are derived from:

- [The Universal Declaration of Human Rights](#)
- [The International Labor Organization's Declaration on Fundamental Principles and Rights at Work](#)
- [The Rio Declaration on Environment and Development](#)
- [The United Nations Convention Against Corruption](#)

The UN Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labor standards, the environment and anti-corruption:

### **HUMAN RIGHTS**

- **Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights; and
- **Principle 2:** make sure that they are not complicit in human rights abuses.

### **LABOR**

- **Principle 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- **Principle 4:** the elimination of all forms of forced and compulsory labor;
- **Principle 5:** the effective abolition of child labor; and
- **Principle 6:** the elimination of discrimination in respect of employment and occupation.

### **ENVIRONMENT**

- **Principle 7:** Businesses should support a precautionary approach to environmental challenges;
- **Principle 8:** undertake initiatives to promote greater environmental responsibility; and
- **Principle 9:** encourage the development and diffusion of environmentally friendly technologies.

### **ANTI-CORRUPTION**

- **Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

## E. Useful Links and References

1. PUMA Sustainability Reports: <http://about.puma.com/en/sustainability/reports/puma-s-sustainability-reports>
2. Global Reporting Initiative: <https://www.globalreporting.org/>
3. BVT Guidance (German Environmental Agency): <http://www.bvt.umweltbundesamt.de/>
4. Greenpeace Detox (ZDHC): <http://www.greenpeace.org/international/en/campaigns/toxics/water/detox/>
5. UN Global Compact: <http://www.unglobalcompact.org/>
6. UNEP Carbon Neutral Network: <http://www.unep.org/>
7. Sustainable Apparel Coalition: <http://www.apparelcoalition.org/>
8. Bluesign: <http://www.bluesign.com/>
9. Leather Working Group: <http://www.leatherworkinggroup.com/>
10. Textile Exchange: <http://textileexchange.org/>
11. Environmental Protection Encouragement Agency (Cradle to Cradle): <http://epea-hamburg.org/index.php>
12. Global Organic Textile Standard GOTS: <http://www.global-standard.org/>
13. Organic Exchange: <http://www.ecocert.com/en>
14. Recycled Polyester Certified by Global Recycle Standard GRS: <http://textileexchange.org/content/global-recycle-standard>
15. Cotton Made in Africa: <http://www.cotton-made-in-africa.com/en/>
16. Blue Sign Certificated Fabrics: <http://www.bluesign.com>
17. Leather Working Group Certified Leather: <http://www.leatherworkinggroup.com/>
18. FSC Certified Paper and Cardboard: <https://ic.fsc.org/en>
19. All Cradle2Cradle certificated Materials: <http://www.c2ccertified.org/>
20. Fair Trade-Certified Cotton or Sports Balls: <http://www.fairtrade.net/>

## F. ZDHC Guidelines – Conventional Parameters

### Appendix A Tables 1A-1B: Conventional Parameters for Wastewater

**Table 1A:** Sum Parameters and Anions

The conventional parameters showing foundational, progressive and aspirational limits, and the standard methods for analysis.

\* Δ is the degree above ambient temperature of receiving water body.

\*\* Validated cuvette methods can be used alternatively.

mg/L unless otherwise noted	Limits			Standard Method for Analysis/Testing			
	Foundational	Progressive	Aspirational	ISO	European Union	United States	China
<b>Sum parameters</b>							
Temperature [°C] *	Δ15 or max. 35	Δ10 or max. 30	Δ5 or max. 25	No standard	No standard	US EPA 17.01	GB/T 13195
TSS	50	15	5	ISO 11923	ISO 11923	US EPA 160.2, APHA 2540D	GB/T 11901
COD	150	80	40	ISO 6060**	ISO 6060**	US EPA 410.4, APHA 5220D**	GB/T 11914**
Total-N	20	10	5	ISO 5663, ISO 29441	ISO 5663, ISO 29441	US EPA 351.2, APHA 4500P-, APHA 4500N-C	HJ 636, GB 11891
pH	6-9			ISO 10523	EN ISO 10523	US EPA 150.1	GB/T 6920
Colour [m <sup>-1</sup> ] (436nm; 525; 620nm)	7; 5; 3	5; 3; 2	2; 1; 1	ISO 7887-B	-	-	-
BOD <sub>5</sub>	30	15	5	ISO 5815-1, -2 (5 days)	EN 1899-1 (5days)	US EPA 405.1 (5 days), APHA 5210B (5 days)	HJ 505
Ammonium-N	10	1	0.5	ISO 11732, ISO 7150	EN ISO 11732	US EPA 350.1, APHA 4500 NH <sub>3</sub> -N	HJ 535, HJ 536
Total-P	3	0.5	0.1	ISO 11885, ISO 6878	EN ISO 11885	US EPA 365.4, APHA 4500P-) )	GB/T 11893
AOX	5	1	0.1	ISO 9562	EN ISO 9563	US EPA 1650	HJ/T 83-2001
Oil and Grease	10	2	0.5	ISO 9377-2	EN ISO 9377-2	US EPA 1664	HJ 637
Phenol	0.5	0.01	0.001	ISO 14402	EN ISO 14402	APHA 5530 B, C&D	HJ 503
Coliform [bacteria/100 ml]	400	100	25	ISO 9308-1	EN ISO 9308-1	US EPA 9132	GB/T 5750.12
Persistent Foam	Refer to respective information in section 9.6.A			N/A	N/A	N/A	N/A
<b>Anions</b>							
Cyanide - Total	0.2	0.1	0.05	ISO 6703-1,-2,-3, ISO 14403-1,-2	ISO 6703-1,-2,-3, ISO 14403-1,-2	US EPA 335.2, APHA 4500-CN	HJ 484
Sulfide	0.5	0.05	0.01	ISO 10530	ISO 10530	APHA 4500-S2-D	GB/T 16489
Sulfite	2	0.5	0.2	ISO 10304-3	EN ISO 10304-3	US EPA 3771	**