



INFORMATION SYSTEM SECURITY –  
SECURITY AND ENVIRONMENT  
CORPORATE DEPARTMENT



# ***ENVIRONMENTAL POLICY***

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***CHAPTER SPECIFIC TO PRODUCTION  
FACILITIES AND OTHER SITES***

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## 1. PURPOSE OF THE DOCUMENT

This document aims at **detailing the General Chapter of the Group's Environmental Policy**, by spelling out the principles, ambitions and obligations applicable to the Group's facilities. The present chapter is in line with the Group's ambition to preserve the environment at every stage of the product life cycle and, beyond, with the Group's "All sustainable" approach: Profit & People & Planet. It is inseparable from the General Chapter of the Policy, which should be read first.

## 2. APPLICABILITY

This document is applicable to manufacturing, R&D, logistics<sup>1</sup> and office **facilities**, in all the Group's companies and subsidiaries, as stated in the General Chapter of the Policy, no later than January 1<sup>st</sup>, 2021.

## 3. THE AIM

The Group is willing to operate sustainably, preserving the environment at our facilities and in their vicinity by:

- Improving environmental **performance** and reducing impacts;
- Identifying and **managing environmental opportunities and risks**;
- Complying with applicable **regulations** and Group obligations.

Steering of this policy essentially relies on:

- Implementation of the **Environmental Management Systems**, in line with the ISO 14001 standard, and adjusted to be relevant to the type of operations<sup>2</sup>;
- For the historical scope of manufacturing and research sites on the **i-MEP-programmes**.

The aim is to **reduce the impact of our activities in absolute value**, so as to progressively move toward our 2050+, polar star, ambition: **"100% of the substances taken from, and emitted to, the environment during the full life cycle of our products can be assimilated by nature and are neutral for human health and biodiversity"**.

<sup>1</sup> Facilities belonging to DOSC will have to refer to DOSC chapter as soon as it is published. Meanwhile, this chapter applies to them.

<sup>2</sup> The relevance of implementing an EMS in facilities with office-buildings only is examined on a case-by-case basis, based on the environmental issues at stake.

## 4. ENVIRONMENTAL RISK MANAGEMENT

The Group's environmental approach on its sites is fundamentally based on environmental risk management. The Group's site risk management relies on the implementation of the Environmental Management System (EMS), which aims at guaranteeing that continuous progress is always looked for to better control environmental risks and identify environmental opportunities, in the daily activity and on the long term.

The Michelin EMS is part of the SMEP<sup>3</sup> and thus structured in five EP processes: 1 – Comply with applicable requirements; 2 – Assess and manage risks; 3 – Implement operational controls and test emergency plans; 4 – Treat anomalies; 5 – Inform, communicate and consult.

The EP processes are complemented by transverse ones: M1 – Measure and understand performance; M2 – Manage activity and progress; M31 – Manage and develop employees and competencies.

The Michelin EMS is totally in line with ISO 14001 requirements. As car-makers progressively required in the late 90s, the Group took the necessary actions to produce tyres in duly certified sites.

The Group's rule is that **every new production, research or natural rubber transformation facility (expansion or totally new) must achieve ISO 14001 certification within five years from start-up.**

## 5. PROGRAMMES TO DRIVE ENVIRONMENTAL PERFORMANCE

The major domains in which are driven the Group's environmental performance are:

### ENERGY AND CO<sub>2</sub>



#### 2050 AMBITION

By 2050, the Group's ambition, for its facilities as a whole, is to achieve "**net<sup>4</sup> zero CO<sub>2</sub> emissions**".

#### 2030 TARGETS AND INDICATORS

The Group's 2030 targets are the following:

- **Divide by two, in absolute value, the Group's CO<sub>2</sub> emissions from facilities** compared with 2010 (**indicator**: tonnes of CO<sub>2</sub> emitted, scopes 1 and 2<sup>5</sup>);
- **Eliminate the usage of coal** for the production of thermal energy, either generated on site or purchased from others. (**indicator**: percentage of coal in our total thermal energy consumption);
- **Improve the energy efficiency of our factories by 37%** vs. 2010 (**indicator**: MWh per tonne produced).

#### PROGRAMME SPECIFIC FUNDAMENTAL RULE(S)

The Group sets and periodically updates an **internal CO<sub>2</sub> price**, used for value creation assessment and project return-on-investment period calculation.

<sup>3</sup> SMEP: Système de Management Environnement et Prévention, Environmental and Prevention Management System

<sup>4</sup> Net emissions (= emissions minus absorptions) from scopes 1 and 2)

<sup>5</sup> Scope 1: CO<sub>2</sub> emissions from the production of energy generated on site. Scope 2: CO<sub>2</sub> emissions from the production of energy purchased from others.

## **VOLATILE ORGANIC COMPOUNDS**



ORGANIC  
SOLVENTS  
CONSUMPTION

### **2050 AMBITION**

By 2050, the Group aims at introducing **zero organic solvent** into tyres during their manufacturing.

### **2030 TARGET AND INDICATOR**

The Group's 2030 target is to reduce by **50% the consumption of organic solvent** in the manufacture of tyres, vs 2020<sup>6</sup> (**indicator**: kg of organic solvent consumed per tonne of finished product).

## **WATER**



WATER  
WITHDRAWALS

### **2050 AMBITION**

By 2050, Michelin has **zero impact** on water availability for local communities.

### **2030 TARGET AND INDICATOR**

The Group's 2030 target is to **cut by 33% water withdrawals, as weighed with sites' water stress coefficients**, compared with 2020<sup>6</sup> (**indicator**: Stress\*m3 per tonne of semi-finished and finished product).

### **PROGRAMME SPECIFIC FUNDAMENTAL RULE(S)**

In the case of new facilities, a study is conducted in order to supply water always preferably from **the most renewable sources** (reclaimed water, then surface water, and then underground renewable water). For all new facilities, the supply of water from non-renewable underground sources is forbidden.

<sup>6</sup> 2020 is not representative of normal operation and cannot be taken as the reference to measure future progress. Consequently, 2019 values were used a "representative" 2020-basis.



## WASTES

### 2050 AMBITION

By 2050, the Group's ambition is to **decrease** the quantity of generated wastes per tonne of products by **50%** compared with 2020<sup>6</sup> (**indicator**: kg of wastes per tonne of semi-finished + finished products). Such an improvement in the performance ratio will result in a reduction in absolute value compared with 2020<sup>6</sup>.

In 2050, 80% of waste recovery is **material recovery**.

### 2030 TARGETS AND INDICATORS

The Group's 2030 targets are the following:

- **Reduce** the quantity of generated wastes per tonne of products by **25%** compared with 2020<sup>6</sup> (**indicator**: kg of wastes per tonne of semi-finished + finished products),
- Decrease the quantity of generated wastes in absolute value (**indicator**: quantity of wastes generated, in tonnes),
- Ensure that 75% of recovered waste are recovered as **materials** (**indicator**: kg of wastes per tonne of SF+PF).

### PROGRAMME SPECIFIC FUNDAMENTAL RULE(S)

- **0W2L** (Zero Waste to Landfill): landfilling is forbidden, except in cases when the impossibility of sustainably recovering a specific kind of waste is clearly demonstrated, based on technical reasons or because the alternative solutions are environmentally worse than landfilling. Even so, landfilling is considered **transitional** until a 0W2L solution is found.
- **Material recovery**: when the "Avoid > Reduce > Reuse > Recycle" hierarchy is respected but wastes are still produced, the rule is to always prefer material recovery rather than energy recovery.

## FUNDAMENTAL RULE(S) COMMON TO ALL PROGRAMMES

In addition to the golden rule and the driver hierarchy defined in the General Chapter of the Environmental Policy, the following rule applies:

**In annual plans, the sites set themselves progress objectives i-MEP component per i-MEP component: the performance degradation of a single component is not accepted, even if the site's i-MEP is improving as a whole<sup>7</sup>.**



When specific circumstances warrant an exception to this rule, it should be submitted for approval by the Environmental Governance.

<sup>6</sup> 2020 is not representative of normal operation and cannot be taken as the reference to measure future progress. Consequently, 2019 values were used as a "representative" 2020-basis.

<sup>7</sup> The total or partial conversion of a facility's energy sourcing from gas to biomass is exempt from the rule. Biomass energy from sustainably managed sources is part of the Group's strategy to reduce CO<sub>2</sub> emissions even though it generates wastes.

## 6. x-MEPS, COMPOSITE ENVIRONMENTAL PERFORMANCE INDICATORS

**x-MEP (Michelin Environmental Performance)** are a set of composite indicators, based on the measurement of the **main environmental impacts relevant for a type of activity**. They belong to the Environmental Governance scorecard.

The **i-MEP**, defined in REF\_005\_EP, is made of the components that are the most relevant<sup>8</sup> to steer impact reduction of research and production facilities in the tyre sector (including both semi-finished and finished products): energy consumption and CO<sub>2</sub> emissions, water withdrawals weighed with water stress coefficients, organic solvents consumption, amount of generated wastes.

Its reference value is 100 in 2020<sup>6</sup>. The 2030 target, **built as the result of the 4 programme objectives**, is a **reduction by one third** compared to the base 100.

Other **x-MEPs**, applicable to other scopes ("x"), therefore based on other sets of components, will be created later on.

## 7. MICHELIN'S IMPACT IS NOT LIMITED TO MEP, NEITHER ARE ITS ACTIONS

x-MEPs are made of the **most relevant components** to steer mid-term environmental stakes related to the site category they apply to. However, the Group's activities may impact other fields where we are willing to control risks, notably:

- the use of chemical products,
- emissions to air,
- emissions to water,
- soil pollution,
- biodiversity.

### EMISSIONS TO AIR AND WATER, SOIL POLLUTION

In these areas, our approach is the following:

- Identify the environmental risks,
- Curb each risk to an acceptable level, through reduction at the source or, failing that, pollution treatment (prevention and protection, under normal or abnormal situations),
- Comply with regulations.

### BIODIVERSITY

The Group's 2030 targets applicable to facilities are the following:

- 100% facilities do not use phytosanitary products for green space maintenance,
- 100% of industrial facilities have a biodiversity management plan in proportion to local issues.

They are part of our 2030  commitments.

<sup>8</sup> In particular, waste landfilling is not part of the i-MEP, because the recovery rate is close to 100 % and it does not make sense to include it in an indicator aimed at steering progress.