

## TNFD Disclosure

Lasertec is intent on solving various issues facing society through its business execution and is actively addressing environmental issues, which are becoming increasingly serious today. As part of these efforts, we conducted an analysis based on the LEAP approach, a framework developed by the TNFD, to evaluate the dependencies and impacts of our operations on biodiversity and natural capital, and to identify the risks and opportunities associated with our business.

The following results have been obtained from the analysis:

1. Some of the major sites involved in our business are located in areas where water stress is relatively high or where the degree of ecosystem loss is high, or are operating near key biodiversity areas (“KBA”).
2. Neither Lasertec nor its contractors to which manufacturing of products is outsourced (“Manufacturing Contractors”) are found to have a high degree of dependency or impact on natural capital, but with respect to the suppliers of components and parts (“Suppliers”), there are some areas where dependency or impact is considered high.
3. No significant risks are identified as a result of the assessment of physical risks and risks associated with the transition to a nature-positive society (“transition risks”) conducted in accordance with the framework of TNFD.

Below, we explain the steps Lasertec has taken in the order of Governance, Strategy, Risk Management, and Metrics and Targets according to the TNFD framework:

### **1. Governance**

Our Board of Directors receives reports on the status of important matters relating to sustainability and conducts its oversight. The department in charge of corporate planning is the secretariat responsible for formulating future policies and for planning and administering sustainability-related initiatives.



## 2. Strategy

We analyzed the interface between our major business sites and the natural environment, examined our dependencies and impacts on nature, and identified risks and opportunities related to natural capital using the LEAP approach (Locate, Evaluate, Assess and Prepare) recommended by TNFD.

### Scope of analysis

Since Lasertec adopts a fab-lite strategy where we focus on product development, design, and sales in-house while outsourcing most of the manufacturing of products and parts, we included not only our own business locations but also the locations of key Suppliers and Manufacturing Contractors in the scope of our analysis to cover the entire upstream of our value chain.

### Locate (interface with nature)

We chose 18 sales/service sites and three manufacturing/development sites of our own Group, 18 sites of 12 Manufacturing Contractors, and 18 sites of 15 Suppliers as our major business locations to be covered in the scope of our analysis. Then, we narrowed them down with the methodology described below to identify sites where dependency and impact on natural capital should be noted and conducted further analysis on them.

Scope		
Lasertec Group	Sales/service	18 sites
	Manufacturing/development	3 sites
Manufacturing Contractors	Outsourcing manufacturing	18 sites 12 companies
Suppliers	Component procurement	18 sites 15 companies

## Method of analysis

We used the data listed below to check the level of water stress, water quality, ecosystem conditions, and biodiversity at each site based on their geographical characteristics.

Referred data for analysis		
Water stress	Aqueduct WATER RISK ATLAS Scenario: Business as usual, Timeframe: 2030, Indicator: Water Stress	<a href="https://www.wri.org/applications/aqueduct">https://www.wri.org/applications/aqueduct</a>
Water quality	WWF Water Risk Filter Surface water Quality Index BOD	<a href="https://riskfilter.org/water/home">https://riskfilter.org/water/home</a>
Ecosystem conditions	WWF Biodiversity Risk Filter Ecosystem Condition	<a href="https://riskfilter.org/biodiversity/home">https://riskfilter.org/biodiversity/home</a>
Biodiversity	IBAT identified Key Biodiversity Areas (KBA)	<a href="https://www.ibat-alliance.org/">https://www.ibat-alliance.org/</a>

## Results

We identified the sites located in areas of concern as shown in the table below and designated them as Priority Areas where operational conditions and impacts on the surrounding environment should be closely monitored from the perspective of conserving natural capital.

Evaluated sites		(sites)				
		Total sites	Water stress <sup>1</sup>	Water quality <sup>2</sup>	Ecosystem conditions <sup>3</sup>	Biodiversity <sup>4</sup>
Lasertec Group	Manufacturing/development	3	0	0	3	0
Manufacturing Contractors	Outsourcing manufacturing	18 sites 12 companies	0	0	15	9
Suppliers	Component procurement	18 sites 15 companies	0	4	15	7

1. Sites located in or operating near areas where the water stress level is rated High or greater in the Aqueduct Water Risk Atlas 2030 projection.
2. Sites located in areas in the top two risk levels (out of six) in the Surface Water Quality Index BOD scale on the WWF Water Risk Filter.

3. Sites located in areas in the top four levels (out of ten) of the Ecosystem Condition scale on the WWF Biodiversity Risk Filter.
4. Sites located in or operating near KBA on the IBAT atlas.

**Evaluate (dependencies and impacts on natural capital)**

We evaluated the dependencies and impacts of our business operations on natural capital by dividing them into three categories: Lasertec’s own manufacturing of machinery, manufacturing of machinery by Manufacturing Contractors, and component production by Suppliers.

For this evaluation, we employed an online tool called ENCORE, which enables users to understand exposures to nature-related risks in specific industries and check information of dependencies and impacts on natural capital. While referring to the ratings of dependencies and impacts provided by ENCORE, we made adjustments to reflect the actual circumstances of each category for our final evaluation.

<b>Dependency</b>	<b>Very High</b>	Very sensitive to disruptions in ecosystem services and are affected immediately.	<b>Impact</b>	<b>Very High</b>	Major damage to ecosystems and natural capital.
	<b>High</b>	Likely to be greatly affected by interruptions or damage to ecosystem services.		<b>High</b>	Significant damage, though not as severe as Very High.
	<b>Medium</b>	Can continue with other options if ecosystem services are lost.		<b>Medium</b>	Minor impact.
	<b>Low</b>	Can run effectively even without ecosystem services.		<b>Low</b>	Almost no impact.
	<b>Very Low</b>	Can fully run without any ecosystem services.		<b>Very Low</b>	No impact.

**Evaluation of Dependencies and Impacts of Activities**

Business			Dependency										
Scope	Division	Activity	Provisioning Services		Regulating Services						Prevention/Conservation		
			Ground water	Surface water	Ventilation	Water flow regulation	Water quality	Pollution removal	Filtration	Noise and light attenuation	Global climate regulation	Flood and storm mitigation	Soil and sediment retention
Own activities	Manufacture of machinery	Manufacturing											
Upstream activities	Outsourcing manufacturing	Manufacturing											
	Component procurement	Procurement											

Business			Impact						
Scope	Division	Activity	Resource Usage	Emissions/Pollution				Disturbances	
			Water use	GHG emissions	Non-GHG air pollutants	Water pollution	Soil contamination		Waste
Own activities	Manufacture of machinery	Manufacturing							
Upstream activities	Outsourcing manufacturing	Manufacturing							
	Component procurement	Procurement							

Reference: ENCORE <https://encorenature.org/en>

**Results**

In our parts procurement activities, we determined that there are significant dependencies and impacts related to water use, GHG emissions, water pollution, soil contamination, and waste emissions at the Suppliers’ manufacturing sites.

On the other hand, in the activities of our Group and Manufacturing Contractors, which mainly involve development and assembly work, the dependency and impact are relatively low due to the low level of GHG emissions and water usage.

Significant Dependencies and Impacts	
Component procurement	<b>Dependencies</b>
	-Ground and surface water usage
	<b>Impacts</b>
	-Water use, GHG emissions, water pollution, soil contamination, and waste emissions

**Assess (risks and opportunities)**

We assessed the risks and opportunities of our business mainly for the areas where significant dependencies or impacts on natural capital are identified in the Evaluate phase.

For this assessment, we first identified specific risks and opportunities related to our business from those presented by the TNFD framework. Then, we assessed the significance and likelihood of each of the identified risks and opportunities to determine its overall rating.

## Results

Based on the above assessment, we identified the risks and opportunities that we should recognize as follows:

Note: Cells in  are risks with high impact, and cells in  are risks with medium impact.

### Risks on the Group

Risks			Potential Impacts on the Lasertec Group	Potential Financial Impacts	Severity
Physical risks	Acute	Degradation of nature and consequential loss of ecosystem services	Risk of natural disasters and water shortages Risk of business suspension due to transportation and supply chain disruptions	Decrease in sales revenue	Low
	Chronic	Shortages of key natural resources become more prevalent and/or severe	Increased cost of air-conditioning for cleanrooms due to higher electricity prices	Increase in cost of goods sold	Low
		Loss of land caused by desertification and degradation of soil and consequential loss of soil fertility	Loss of value and early retirement of existing assets Flood risk due to rivers overflowing	Increase in cost of goods sold and SG&A expenses	Low
Transition risks	Policy	Policy changes and new strategies to meet environmental goals	New regulations on CO2/GHG emissions and the use of natural capital. Introduction of carbon taxes	Increase in SG&A expenses	Medium
		Stricter laws and regulations relating to existing products/services	Increased costs due to stricter environmental regulations	Increase in SG&A expenses	Medium
		More stringent reporting obligations	Additional expenses related to reporting and information gathering	Increase in SG&A expenses	Medium
	Market	Shifting customer values or preferences	Risk of procurement changes due to changes in customer demands	Decrease in sales revenue	Medium
		Increased costs or supply shortages of raw materials	Increased procurement costs and increased costs at manufacturers due to higher environmental-related expenses	Increase in cost of goods sold	Medium
	Technology	Costs to transition to lower emissions technologies	Additional investments to meet technological changes	Increase in investment cash flow	Medium
			Risk of obsolescence of current technologies and equipment	Increase in extraordinary losses	Medium
Legal	Compliance with new laws and regulations	Increased costs due to stricter environmental regulations	Increase in SG&A expenses	Medium	

## Risks on Manufacturing Contractors

Risks			Potential Impacts on Manufacturing Contractors	Potential Financial Impacts	Severity
Physical risks	Acute	Degradation of nature and consequential loss of ecosystem services	Risk of natural disasters and water shortages Risk of business suspension due to transportation and supply chain disruptions	Decrease in sales revenue	Low
	Chronic	Shortages of key natural resources become more prevalent and/or severe	Increased manufacturing costs due to rises in electricity expenses	Increase in cost of goods sold	Low
Transition risks	Policy	Policy changes and new strategies to meet environmental goals	New regulations on CO2/GHG emissions and the use of natural capital. Introduction of carbon taxes	Increase in cost of goods sold	Medium
		Stricter laws and regulations relating to existing products/services	Increased costs due to stricter environmental regulations	Increase in cost of goods sold	Medium
		More stringent reporting obligations	Additional expenses related to reporting and information gathering	Increase in cost of goods sold	Medium
	Market	Increased costs or supply shortages of raw materials	Increased procurement costs and increased costs at manufacturers due to higher environmental-related expenses	Increase in cost of goods sold	Medium
	Technology	Costs to transition to lower emissions technologies	Additional investment to meet technological changes and the associated price pass-through	Increase in cost of goods sold	Medium
			Changing of suppliers due to technological shifts and increased procurement costs due to reduced supply	Increase in cost of goods sold	Medium

## Risks on Suppliers

Risks			Potential Impacts on Suppliers	Potential Financial Impacts	Severity
Physical risks	Acute	Degradation of nature and consequential loss of ecosystem services	Risk of natural disasters and water shortages Risk of business suspension due to transportation and supply chain disruptions	Decrease in sales revenue	Low
	Chronic	Shortages of key natural resources become more prevalent and/or severe	Water scarcity due to climate change and consequential risk of supply shortages	Increase in cost of goods sold	Low
Transition risks	Policy	Policy changes and new strategies to meet environmental goals	New regulations on CO2/GHG emissions and the use of natural capital. Introduction of carbon taxes	Increase in cost of goods sold	Medium
		Stricter laws and regulations relating to existing products/services	Increased costs due to stricter environmental regulations	Increase in cost of goods sold	Medium
		Natural resource rights, permits, and allocations	Increased costs due to stricter regulations on the use of water resources, pollution, waste discharge, and others	Increase in cost of goods sold	Medium
			Reduced availability of resources due to the above factors	Increase in cost of goods sold	Medium
		More stringent reporting obligations	Additional expenses related to reporting and information gathering	Increase in cost of goods sold	Medium
	Technology	Costs to transition to lower emissions technologies	Additional investment to meet technological changes and the associated price pass-through	Increase in cost of goods sold	Medium
Changing of suppliers due to technological shifts and increased procurement costs due to reduced supply			Increase in cost of goods sold	Medium	

## Opportunities for the Group

Opportunities		Potential Impacts on the Lasertec Group	Potential Financial Impacts	Severity
Opportunities Resource Efficiency	Use of more efficient production and distribution processes	Reduced costs due to more efficient transportation and higher sales due to increased production efficiency	Increase in sales revenue and decrease in cost of goods sold and SG&A expenses	Medium
	Increased reuse and recycling of natural resources	Limited upside as reuse and recycling efforts are already in place	Decrease in cost of goods sold and SG&A expenses	Low
	Reduced waste generation	Lower raw material costs due to less waste generation	Decrease in cost of goods sold	Low
	Diversification of natural resources	Lower energy costs due to diversification of energy sources (size of the reduction will depend on factors such as adoption of carbon tax)	Decrease in cost of goods sold and SG&A expenses	Low
Products and Services	Development of products and services that are not resource-intensive	Reduced costs from lower water usage in manufacturing and increased sales from the development of energy-efficient products	Increase in sales revenue and decrease in cost of goods sold	Medium
	Development of green products	Increased demand for systems related to leading-edge semiconductors and power semiconductors	Increase in sales revenue	High
	Diversification of business activities (e.g., new business related to green infrastructure)	Increased revenue from identifying new customer needs and developing solutions for them	Increase in sales revenue	Low
Market	Use of public-sector incentives	Limited benefits to the company	Increase in profits	Low
Financial incentives	Incentives for suppliers to improve environmental and ecosystem management	Mitigating impacts from physical and transitional risks leads to reduced costs	Decrease in cost of goods sold	Low

## Risks

As analyzed in the Evaluate phase, the degree of dependency and impact on natural capital is not high in the machine manufacturing activities conducted by our Group and Manufacturing Contractors. Therefore, the physical risks from natural capital are not significant. Even for our Suppliers, although the degree of dependency and impact on natural capital is relatively high, no significant risks were identified.

However, regarding the risks associated with transition to a nature-positive society aiming to halt and restore biodiversity loss, it is determined that there will be a certain degree of impact in the aspects of policy, market, and technology, although it is not a significant risk.

## Opportunities

The increasing market demand for environmentally friendly products and green solutions presents new business opportunities for our Group. By proactively developing such products and disclosing relevant information, we aim to capture these opportunities and pursue both social and economic value in the transition to a nature-positive society.



### **Prepare (actions)**

Based on the results of the analysis described above, we plan to take the following actions:

1. Although the results indicate that our operations do not pose significant risks to natural capital, we will strive to raise awareness across the supply chain and establish a system to effectively manage greenhouse gas emissions, water usage, wastewater quality, and waste disposal so that we can prevent or mitigate risks associated with future business expansion.
2. To address water stress concerns, we will actively manage the intensity of water usage per revenue and aim to prevent it from increasing annually.
3. We will invest proactively in the development of environmentally friendly products.

### **3. Risk Management**

We have established the Risk Management & Compliance Committee, chaired by the officer responsible for risk management and compliance. This committee is tasked with identifying, evaluating, responding to, and monitoring material risks in alignment with our business strategy, ensuring we adapt to changes in the external environment.

### **4. Metrics and Targets**

We identified greenhouse gas emissions (Scope 1, 2, and 3) and water usage as key environmental performance indicators. Our targets include achieving net-zero Scope 1 and 2 emissions by 2050. Scope 3 emission targets are under consideration. We also aim to prevent the intensity of water usage per revenue from increasing on an annual basis.