

LITEON Impact Analysis

Foreword

Most businesses today have a primary focus on profitability, often emphasizing financial value while overlooking the many impacts that their business activities have on society, such as environmental and social effects, known as externalities. Yet, these impacts have a direct or indirect effect on the business value and interests of stakeholders. From a value perspective, there are two main viewpoints: the stakeholder perspective focuses on the positive and negative impacts of business activities on the environment and resulting social impacts, while the financial perspective is concerned with how these impacts and dependencies affect the (long-term) financial performance of the business. These two perspectives are essentially interconnected and represent a "double materiality" approach. LITEON aims to be the sustainable best partner for all stakeholders, creating maximum long-term value, both financially and non-financially. Recognizing this trend, in our 2022 Sustainability Report, we introduce the concept of **double materiality** and further undertake outcome and impact identification and impact assessment monetization for key material topics.

Methodology

LITEON primarily references the **Value Balancing Alliance (VBA)** methodology as an overall ESG indicator monetization assessment framework using the **Impact Pathway** structure. This analysis covers the upstream supply chain, company operations, and downstream products and services, analyzing the interdisciplinary intersection of economic, environmental, and social issues.

In the economic dimension, we use the **Gross Value Added (GVA)** methodology to measure the economic value created for stakeholders in our own production and operational processes. In addition, we use an **input-output(IO) model** to analyze the external economic value created by LITEON's procurement activities across the entire industry chain. In the environmental dimension, we follow the concept of **Environmental Profit and Loss(EP&L)**, using the Valuing Corporate Environmental Impacts **PwC Methodology** Document as a project guide, and reference the **Impact-Weighted Accounts (IWA)** methodology and tools to conduct a more comprehensive environmental monetization impact assessment calculation. For the downstream product impact assessment, we use the **LCA framework** to define LITEON product categories and calculate impacts at different stages. In the monetization assessment process, we also reference coefficient databases published by international economic authorities such as governments, academia, and the **OECD's Inter-Country Input-Output (ICIO) Database** as secondary data, as well as estimate the social costs of occupational injuries and the social value derived from carbon management and green product design.

Impact Description and Results

In 2022, LITEON created a **direct economic contribution of NT\$45.56 billion** for internal and external stakeholders in the economic dimension, calculated using the VBA methodology, including six aspects: operating profit, taxes, research and development investments, employee salaries and benefits, interest

and rental expenses, and depreciation and amortization. These contributions can create more job opportunities, drive economic growth, bring more tax revenue to the government, and even support beneficial initiatives such as social welfare policies. Through investment in R&D and technological innovation, LITEON promotes overall social technological progress and industrial transformation and upgrading. In the supply chain, LITEON's direct procurement is analyzed using secondary data from the OECD Data Set and an input-output model, where the IO multiplier provides a means of estimating the indirect and induced effects of a company or certain company activities on the economy as a whole. By multiplying the Leontief inverse by the changes in final demand, it is possible to determine the total production necessary for the company's production process at all stages. This allows for a comprehensive analysis of the economic impact of a LITEON and its activities, including its effects on supply chain's gross output, value-added, wages, employment, and various satellite accounts. In 2022, **the total output value generated by the supply chain created by LITEON's procurement demand is approximately NT\$326.3 billion, creating employment opportunities for 1.61 million people, with a total labor income of approximately NT\$12.69 billion.**

At the social level, LITEON places great importance on occupational safety and health management performance, providing stakeholders such as employees, customers, communities, and operation partners with safe, comfortable, low environmental impact, and efficient operational services. We view occupational safety and health management as a differentiation competitive advantage, and achieving zero accidents in the workplace is a continuous goal. Regarding job injuries, people may notice the additional medical expenditures associated with work accidents and work-related illnesses, but the costs faced by individuals and families due to income loss result in a greater burden on the economy. According to estimations, 55% of the total cost can be attributed to income loss, while medical costs and insurance costs accounted for 17% and 10%, respectively. Against the backdrop of demographic changes, this will have a more significant impact on future productivity growth. In particular, with an aging workforce, avoiding any losses of resources and productivity becomes even more critical. Therefore, following the VBA guidelines, we conducted an OHS impact assessment, and in 2022, **the social cost of job injuries caused by LITEON's workers worldwide amounted to approximately NTD 5.074 million.**

As a company in the optoelectronics manufacturing industry, LITEON considers climate adaptation and mitigation, energy management, and carbon emissions reduction to be among our most material issues. Social externalities caused by climate change include economic disruptions caused by extreme weather, ecological damage, public health issues caused by natural disasters, public health issues caused by diseases, food and water shortages, and social and political problems caused by deteriorating living environment, which ultimately affect human social stability. Emissions from corporate activities such as energy use (direct emissions from fossil fuel combustion and indirect emissions from the use of electricity, steam, or cooling energy) and direct emissions from chemical processes. Therefore, for carbon emissions, we adopted the Social Cost of Carbon (2016a) developed by the US Environmental

Protection Agency and selected a 3% discount rate as the external cost value coefficient for each unit of greenhouse gas emissions. Calculating for every ton of CO₂ and based on the carbon emission data in 2022, **LITEON's organized carbon emission social cost is about NTD 290 million.** In the waste management sector, using research coefficients, we calculated the environmental costs generated from **waste management**, with a total of approximately **NTD 5.8 million** for incineration and landfill components. Moreover, we used Impact-Weighted Accounts (IWA) tools provided by Harvard Business School to comprehensively examine the externalities of LITEON's global operations. We emphasized environmental indicators and included the calculated results as part of a worst-case scenario for risk assessment. According to IWA calculations, in 2022, **LITEON's total environmental externalities, including GHG, VOC, NOX, SOX, water use, PM 2.5, and miscellaneous, amounted to NTD 760 million.** However, we are also dedicated to climate change mitigation and adaptation, leveraging the core expertise of our optoelectronics business to develop low-carbon products. LITEON bases our product design and development on a life cycle thinking approach that incorporates the 3R principle to create environmentally friendly products that are easy to assemble, disassemble, and have low energy consumption. For example, in the area of power supply products (such as power adapters for servers and 3C products), we have upgraded to LED and improved energy efficiency for streetlights. In addition, we have reduced energy consumption, lowered material usage, and minimized carbon emissions by using low-carbon recycled materials, improving packaging technology, and extending the product lifespan. Based on our 2022 shipment volume estimates, **our green product design has driven environmental value creation of approximately NTD 780 million.**

Going forward

This year marked the first time LITEON conducted a sustainability impact assessment, and we plan to expand social impact calculations in the future while strengthening coefficients and methodological adjustments to make the calculations more relevant to the company's operations. The assessment results will be included in LITEON's material topic identification process and timely included in the Corporate Sustainability Committee's report agenda as a reference for the executive decision-making process. We will continue to work with our partners, using technological innovation as a driver, to achieve a greener, healthier, and fairer future. We believe that through joint efforts, LITEON will be able to achieve both excellent financial and non-financial performance, becoming a leading brand with an even more substantial impact.