

## Making Industrialization in Africa Sustainable

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### **A b s t r a c t**

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**A**s my own country, China has shown, strong growth in the manufacturing industry is a key driver of sustainable development. It has a significant impact on economic and social well-being, as a recent report by the United Nations Industrial Development Organization (UNIDO) demonstrates. The report looks at data across all countries and plots manufacturing value-added per capita, along with competitiveness, against indicators on poverty, inequality, health, education, employment, and human development. The results provide clear statistical evidence on how closely the process of industrialization is connected to improvements in people's living conditions and their quality of life.

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### **Background to the Study**

Africa remains the world's least industrialized region, with only one country on the entire continent, South Africa, currently categorized as industrialized. There is general agreement that this has to change. There needs to be a fundamental shift in the structure of the economies of African nations. Industry, especially manufacturing, will have to account for a far greater share of national investment, output, and trade. It is expected that the African Continental Free Trade Area (AfCFTA) agreement, which will become operational on 1 January 2021, will usher in new and dynamic opportunities by enhancing intra-African trade and fostering an environment that can unlock foreign direct investment in the continent. There is also the prospect of many of the 100 million labor-intensive jobs that are projected to leave China by 2030 being relocated to African countries (Landry, 2018).

But to seize these opportunities, it is imperative that all countries in Africa, both individually and together, fully commit to an industrial transformation agenda that reflects the crucial role of industry in the continent's development. Industrialization must be accorded the highest priority in the socio-economic development agenda. Africa should not follow the same path of industrialization as that pioneered in Europe and North America. Industrial development in Africa needs to be inclusive and sustainable: inclusive so that all sectors of society can participate and benefit from industrialization, and sustainable so that the environment does not suffer.

The importance of promoting cleaner and resource-efficient pathways to increase manufacturing production, and of the decoupling of economic growth from environmental degradation, cannot be emphasized strongly enough. We cannot deny that one side effect of industrialization in the past has been its considerable environmental footprint. No country has yet fully resolved the issues of waste management, water purification, and pollution. However, experience shows that environmentally sound interventions in manufacturing industries can be highly effective and significantly reduce environmental degradation.

### **Experience from African Countries**

As existing industries in Africa expand and develop, they must make use of today's technological capabilities for cleaner industrial production. New industrial plants must be constructed to ensure that production patterns are sustainable. Industrial development does not have to damage the environment, pollute the air and water, or release damaging greenhouse gases. The transformation in production processes and business models—going hand-in-hand with the right choice of technologies—will present solutions to the daunting environmental challenges of our times. Moreover, committing to sustainable production patterns makes business sense, as it reduces the waste of costly resources and contributes to increased competitiveness.

Ethiopia is an example of how industrialization can create jobs and improve livelihoods without damaging the environment. According to Lelise Neme, Commissioner of the Ethiopian Investment Commission and former Chief Executive Officer of Ethiopia's

Industrial Parks Development Corporation, the Government has invested around \$1.3 billion in the construction of around a dozen industrial parks. The parks have attracted anchor companies from China, India, the Republic of Korea, Sri Lanka, Taiwan Province of China, and the United States, and have created more than 50,000 permanent jobs, of which more than 85 percent are held by women (United Nations Industrial Development Organization, 2019).

One of the first public industrial parks built is located in Hawassa, a city in southern Ethiopia with around 300,000 inhabitants. The Hawassa Industrial Park, which opened in July 2016, is the Ethiopian Government's flagship industrial park, one that is described as Africa's first zero-emission textile industrial park, with state-of-the-art infrastructure and equipment. An Indian sewage treatment company, Arvind Envisol, is providing industrial wastewater management solutions for the park, to replicate them in all such parks. At Hawassa, 85 percent of industrial effluent is recycled (Tara, 2016).

Another example is the South Africa Industrial Energy Efficiency project, a UNIDO initiative that has demonstrated the potential of increased energy efficiency in industrial production in that country. Since energy inputs represent an important cost of production for industries, clean energy, and energy efficiency have progressively become core determinants of economic competitiveness and sustained growth. In South Africa, the introduction of energy management systems in industrial companies has slashed energy costs and cut down on emissions. Between January 2016 and April 2018, the project supported around 80 companies in saving 335 GWh of energy (334.1 tonnes of CO<sub>2</sub> equivalent) (United Nations Industrial Development Organization, 2019).

### **Conclusion and Development Option**

African countries should adopt a holistic approach to industrial policy, pursuing green and clean industrialization strategies that promote equitable economic opportunities and take into account the urgency of addressing the climate crisis. UNIDO, together with other multilateral and regional entities, is working with African governments and private sector companies to help ensure the sustainability of industrialization with initiatives in areas such as technology transfer, agribusiness value chain development, renewable energy, and the development of special economic zones and industrial parks.

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