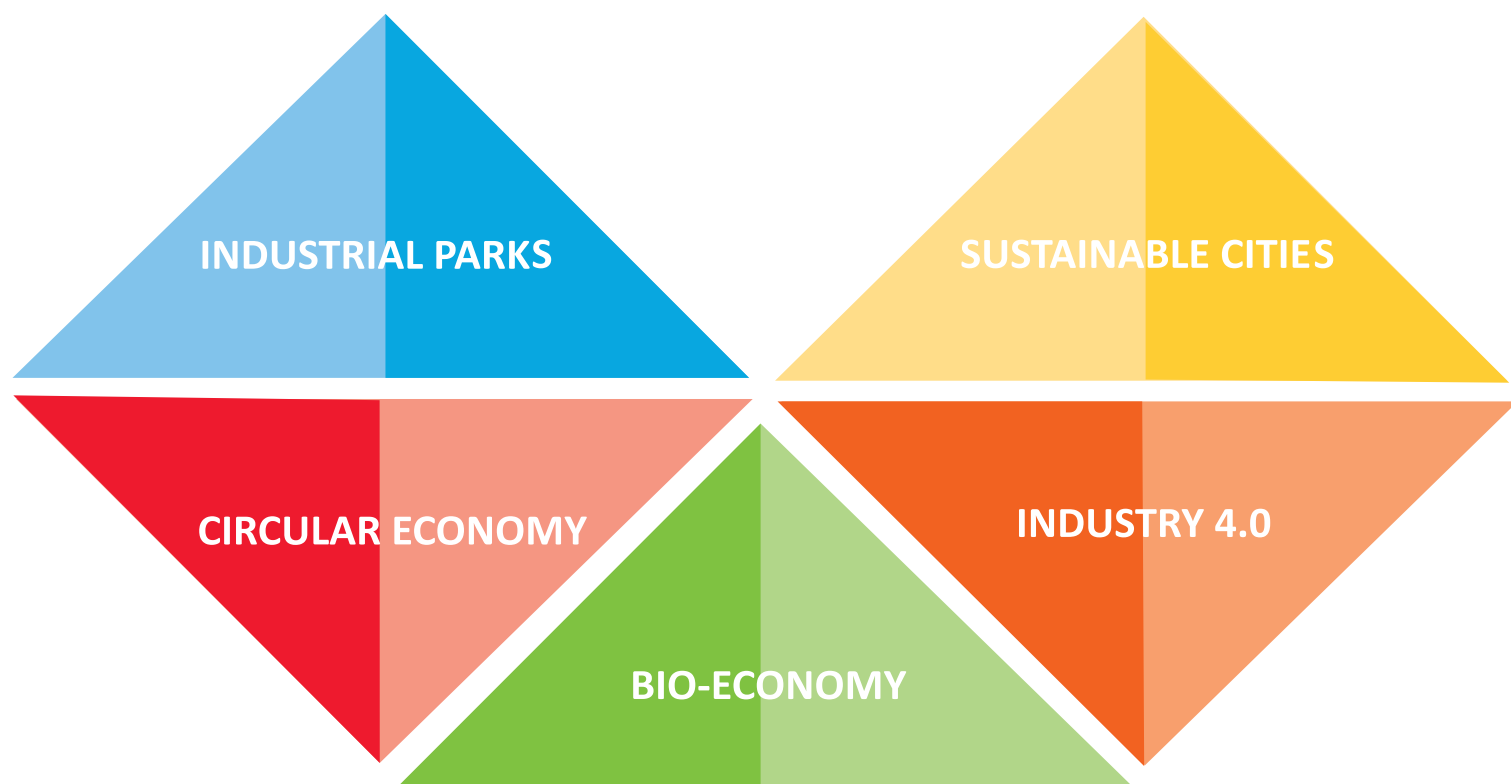




UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO's cross-cutting services for the advancement of global development and implementation of the SDGs



INCLUSIVE AND SUSTAINABLE INDUSTRIAL DEVELOPMENT



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO. The selection of projects to illustrate UNIDO’s engagement aims at demonstrating their geographic and thematic variety and scope and is not endorsed by UNIDO.

November 2017

CONTENTS

FOREWORD 4

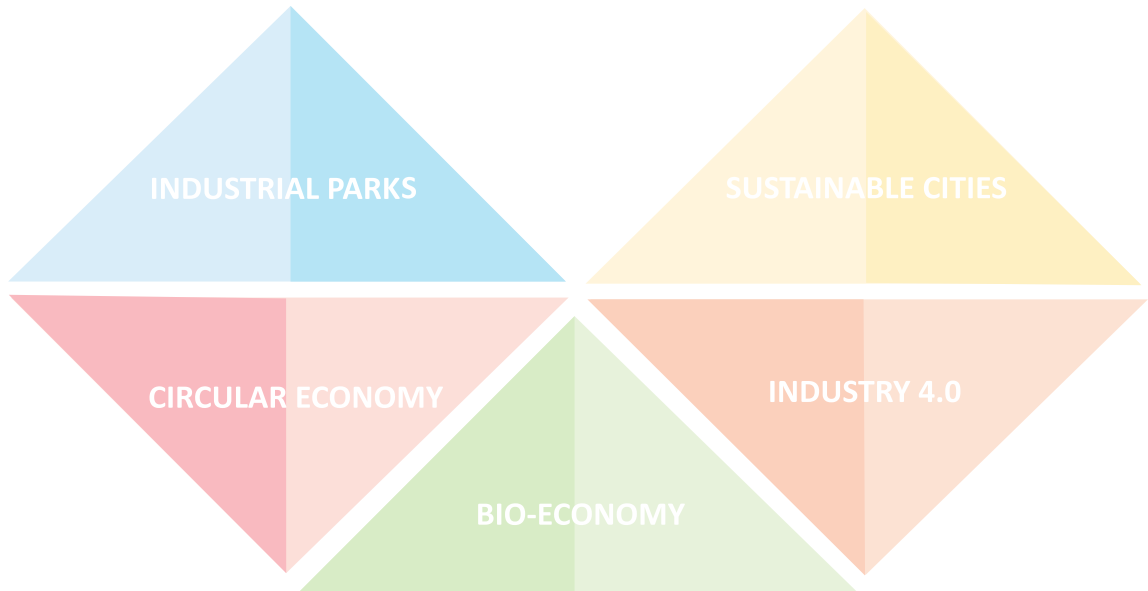
INDUSTRIAL PARKS 7

SUSTAINABLE CITIES 11

CIRCULAR ECONOMY 15

INDUSTRY 4.0 21

BIO-ECONOMY..... 25





FOREWORD

Emerging industrial technologies are shaping the future of global economic development, transforming current business models, combining the physical, digital and biological worlds under the New Industrial Revolution. However, important questions remain about further implications for existing industries, value chains, business models, and workforces, and about the type of actions governments and business leaders need to take to ensure the long-term success of advanced manufacturing.

UNIDO assists countries – in particular developing countries – in achieving equitable economic growth without harmful effects to the environment, demonstrating that the creation of industries and increase in employment can go hand-in-hand with the reduction of resource use and pollution. By taking full advantage of such cross-cutting issues as industrial parks; sustainable cities; the circular economy; Industry 4.0; as well as the bio-economy, we can effectively support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

We are already helping power the SDGs through a range of policies and services, one of them being the establishment of **industrial parks**. This has been at the forefront of our flagship Programme for Country Partnership, currently implemented in Ethiopia, Senegal and Peru.

Together with our Member States and partners, we promote the concept of **sustainable cities**, applying our inclusive and sustainable industrial development (ISID) approach. We acknowledge the importance of city-to-city cooperation, which UNIDO actively promotes, including through international high-level Belt and Road events.

Industry 4.0 can help us create a better, cleaner and safer world by improving productivity and competitiveness, increasing energy and resource efficiency, and therefore protecting the environment. It brings a plethora of new opportunities for development, and can help in the transit to a **circular economy** with more sustainable production and consumption patterns.

Access to food, clean water and modern energy services is crucial for all nations, and advances in the field of the **bio-economy**, which UNIDO follows closely, help improve food safety and increase nutrition and sustainable production, this contributing to the overall goal of eradicating poverty.

Developing countries and economies in transition must reap the benefits of the new industrial revolution. UNIDO stands ready to support countries in this respect through various interventions and policy advice, ensuring prosperity for all. This brochure explains how we do it.

LI Yong
Director General, UNIDO



INDUSTRIAL PARKS

SUSTAINABLE CITIES

CIRCULAR ECONOMY

INDUSTRY 4.0

BIO-ECONOMY

Industrial parks help foster economic development by providing an institutional framework, modern services, and a physical infrastructure that may not be available in the rest of the country. A concentration of companies within such parks helps foster innovation, technological learning and company growth, and can reduce costs for companies.

An industrial park is however, competing on two levels -- national and international. At both levels, the park must be competitive enough and relative to its national or international peers. Industrial parks serve as a step towards more advanced industrial infrastructure such as export processing zones, or science and technology parks, etc. The motivation to develop an industrial park can be developmental, promotional, or dispersal (moving factories away from urban centres).

WHAT IS AN INDUSTRIAL PARK?

In the late 1990s, UNIDO defined industrial parks as “a tract of land developed and subdivided into plots according to a comprehensive plan with provision for roads, transport and public utilities with or without built-up (advance) factories, sometimes with common facilities and sometimes without them, for the use of a group of industrialists”.

As the world economy moves towards more advanced forms, and more complex distribution of production and new structures are introduced, industrial parks may also be converted and upgraded to feature a more complex internal division of production. Their whole structure becomes more scientific, intelligent and eco-friendly.

Since 1978, UNIDO has been providing direct assistance to many developing countries in support of establishing industrial estates, and has published guidelines and specifications for the construction of small-scale industry estates. It continues offering technical assistance, policy advice, investment promotion, standards development, and training activities.

UNIDO has published over 100 studies in this respect, reflecting on the topic from both a regional and global perspective, and has organized a number of conferences on industrial estates as instruments for economic development.

The establishment of industrial parks is one of the most efficient and effective means to stimulate a country's innovation and economic growth. In developing and least developed countries, industrial parks help foster economic growth and employment at the national, regional, and local level. They also attract Foreign Direct Investment.

China is one of the most successful examples in this regard. In the last four decades, the Government of China, with the assistance of UNIDO, has established industrial parks based on the different economic characteristics of each region in the country. The success of industrial parks helped China introduce and widen industrial development and eventually achieve a huge economic leap. Now, beneficiary countries of industrial parks, such as China, are providing financial and technical support for upgrading the industrial parks standard within the framework of UNIDO's inclusive and sustainable industrial development approach and SDG9.

TYPICAL FORMS OF INDUSTRIAL PARKS

Industrial Parks which generally focus on manufacturing are the simplest form of planned estates to help in fostering local economic development. They can provide physical infrastructures, such as roads and public utilities, a wide-range of soft infrastructures, such as common facilities, support services such as consulting, and financial, and offer training, and technical guidance, as well as joint research facilities, information and business support services.

Agro-Industrial Park is described as a well-defined industrial platform where agro-industries and other companies engaged in agro-processing and related activities are concentrated. They are strategic tools for agricultural and agro-industrial development aimed at increasing competitiveness (generating positive externalities in labour markets and in the environment) while respecting the idiosyncrasies of each territory.

Technology parks are also known as science parks, research parks, innovation centres, and technopoles. The International Association of Science Parks defines them as an organization managed

markets; facilitate the creation and growth of innovation-based companies through incubation and spin-off processes; and provide other value-added services together with high quality space and facilities. The concept of technology parks as a tool for fostering innovation is often modeled on the Silicon Valley.

Innovation districts are urban technology parks. They can be defined as top-down urban innovation ecosystems designed around four multilayered and multidimensional models of innovation: urban planning, productive, collaborative, and creative, all coordinated under a strong leadership, with the ultimate objective of accelerating the process of innovation and strengthening the competitiveness of the location. Innovation districts aim to replicate the spontaneous growth through market forces of urban innovative milieu such as the Silicon Alley (Manhattan), the Cyber district (Boston), or the Silicon Sentier (Paris).

Eco-industrial parks are defined as a community of manufacturing and service businesses located together on a common property. Member businesses seek enhanced environmental, economic, and social performance through collaboration with universities, environmental

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_23178

