# 2025 Enterprise Innovation and R&D Funding Programme – Key R&D Projects(Focused Technology Breakthroughs by Key Technology Enterprises)

# **Application Guidelines**

# I. Background

In light of intensifying global competition in science and technology, the Macao SAR Government has introduced a series of policy initiatives to vigorously support the growth and development of local technology enterprises. Through technological innovation, the Government aims to enhance Macao's competitiveness within the regional and global economic landscape and facilitate its integration into national development strategies. These guidelines have been formulated by the Science and Technology Development Fund (FDCT) in line with the policy directions of the Macao SAR Government.

# II. Overall Objective

The implementation of these guidelines aims to strengthen the R&D capabilities of Macao's key technology enterprises by providing dedicated financial support to facilitate research into critical technologies. It seeks to guide enterprises in establishing a solid technological foundation for their medium- and long-term development, enhance their innovation capabilities and core competitiveness, promote breakthroughs in their respective technology fields, and accelerate the transformation and industrial application of research outcomes. This will, in turn, contribute to the upgrading of Macao's science and technology industries and the appropriate diversification of the economy.

#### III. Research Areas

#### 1. Traditional Chinese Medicine and Health:

Including the development of new Chinese medicines, innovation in traditional Chinese medical diagnostic and treatment technologies, the development of health management and wellness products, and the internationalisation of TCM. Enterprises are encouraged to apply modern science and technology to explore the scientific value of TCM, improve product quality and safety, and expand applications in the health service sector.

#### 2. Integrated Circuits:

Focusing on integrated circuit design, supporting enterprises in conducting R&D in advanced chip design technologies to enhance Macao's technical capacity and industrial support in the integrated circuit sector.

#### 3. Biomedicine:

Including innovative drug development, medical device R&D, biomedical engineering, and biopharmaceutical technologies. Support will be provided to enterprises engaged in the development of innovative biomedicine products with proprietary intellectual property, to improve the industry's innovation capacity and global competitiveness.

#### 4. Digital Technology:

Covering big data, artificial intelligence, cloud computing, blockchain, the Internet of Things, and cybersecurity. Enterprises will be supported in leveraging digital technology to innovate business models, upgrade products and services, deeply integrate digital technologies with traditional industries, foster emerging digital industries, and advance Macao's digital transformation.

# IV. Eligibility

- 1. The lead applicant must be a key technology enterprise certified under the Technology Enterprise Certification Programme of the Economic and Technological Development Bureau (DSEDT). Each enterprise may lead no more than one project under these guidelines.
- 2. Each enterprise may not lead more than one ongoing Key R&D Project at a time.

# V. Application Requirements

#### 1. Preliminary Research Results:

The applicant must have obtained prior research results relevant to the proposed project, with supporting documentation. These results should demonstrate the applicant's research foundation and technical capacity in the field. Examples include published influential research papers, granted patents, completed technical verifications, or developed prototypes.

#### 2. Core Intellectual Property:

The applicant must own core intellectual property closely related to the proposed project, with supporting documentation. This includes, but is not limited to, patents, software copyrights, and layout-designs of integrated circuits.

#### 3. Affiliated Enterprises in Hengqin<sup>1</sup>:

If the preliminary research results or intellectual property involve affiliated enterprises in Hengqin, the applicant must provide documentation verifying the equity relationship and agreements specifying IP ownership.

#### 4. Enterprise Co-funding Commitment:

The applicant must commit to providing matching funds during project

<sup>&</sup>lt;sup>1</sup> This refers to a direct or indirect shareholding relationship between the applicant enterprise and an enterprise in Hengqin, where one party directly or indirectly holds more than 50% of the equity of the other.

implementation, in an amount no less than 50% of the FDCT funding. If affiliated enterprises in Hengqin provide part of the matching funds, such contributions may be included in the total matching amount of the applicant.

# **VI. Project Requirements**

#### 1. Alignment with Core Business:

The proposed project must be closely aligned with the applicant's main business and should focus on technological breakthroughs and innovation within the enterprise's core development areas. This ensures that research resources contribute effectively to the enterprise's core competitiveness.

### 2. Medium- to Long-term Development Focus:

The project should address the enterprise's development strategy over the next 3 to 5 years (or longer), solving key problems in technology upgrades, product iteration, and market expansion to support sustainable growth.

#### 3. Clearly Defined and Quantifiable Outcomes:

The project must define clear and quantifiable expected outcomes. These may include:

- o In R&D: Number of patent applications, target improvements in technical parameters.
- o In Product Development: Product launch timelines, target market share.
- o *In Economic Benefits*: Targets for revenue, profit, total assets, and workforce expansion.

For key technical indicators, international standards, industry benchmarks, or indicators of leading industry levels should be cited for comparison.

#### 4. Comprehensive Research Plan:

The proposal must provide a detailed research plan, including methodology, technical roadmap, implementation steps, and timeline. Responsibilities of team members must be clearly defined to ensure orderly project execution.

#### 5. Risk Assessment and Mitigation:

The project must include a thorough assessment of potential technical, market, and financial risks, along with mitigation plans to reduce the impact of such risks and ensure smooth project implementation.

# VII. Project Duration and Funding Cap

The project implementation period is four years. The maximum funding amount per project is MOP 15 million.