

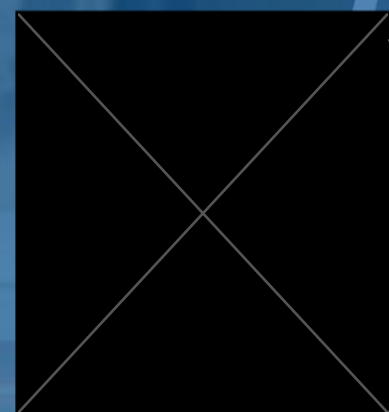


TESOURO NACIONAL

**2026**

# **Eco Invest Brasil**

*5th Auction - Accelerating Innovation  
for National Competitiveness*





# THE BRAZILIAN PARADOX

Brazil invests in  
research, but *fails to  
translate this* into  
competitive technology.





Zn 47 ppm

R & D AND INNOVATION

# Brazilian context

52nd

BRAZIL'S RANKING IN THE WORLD  
INTELLECTUAL PROPERTY  
ORGANISATION'S (WIPO) 2025  
GLOBAL INNOVATION INDEX

Source: WIPO

26x<sup>+</sup>

THIS IS HOW MANY TIMES OECD  
COUNTRIES **OUTPERFORM BRAZIL**  
IN INTERNATIONAL PATENT FILINGS

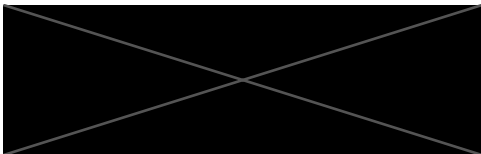
Source: OECD

26%

OF RESEARCHERS IN BRAZIL ARE  
IN THE PRIVATE SECTOR. IN  
COUNTRIES LEADING IN  
INNOVATION, THIS FIGURE  
**EXCEEDS 70%**

Source: OECD and MCTI

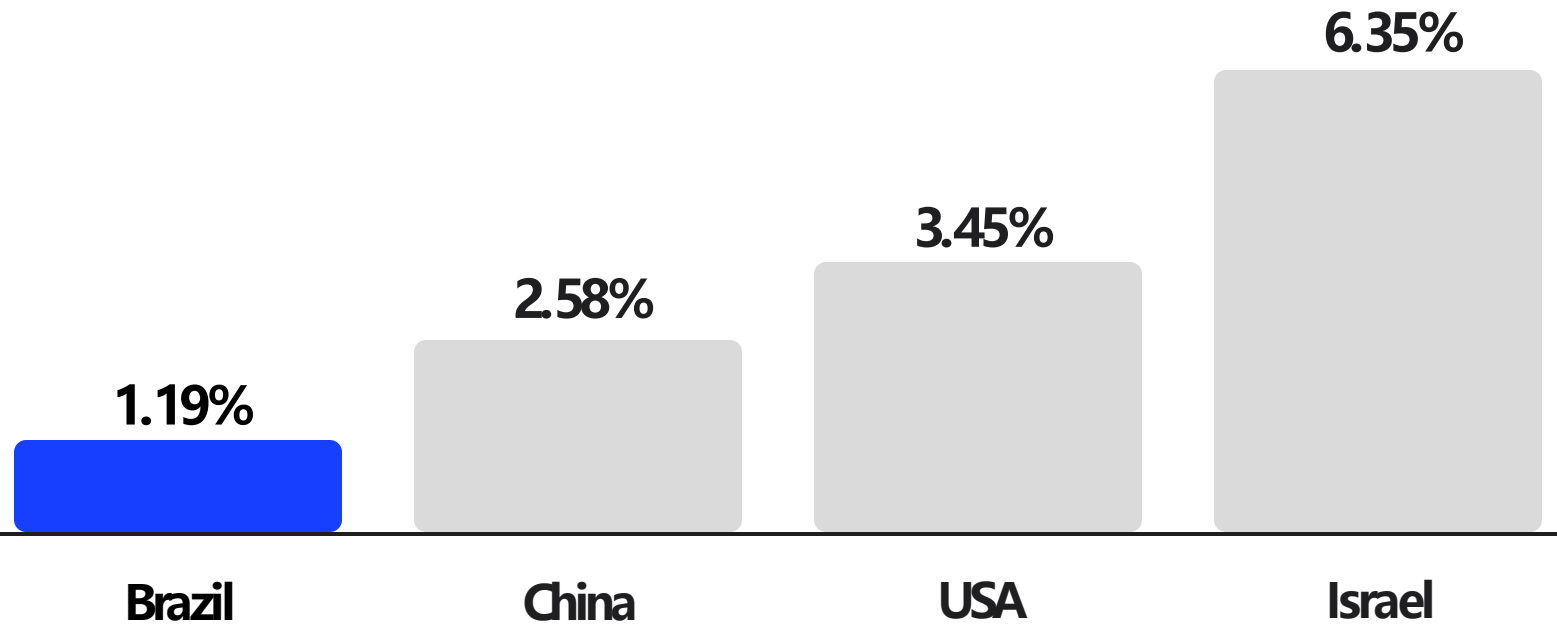




# Compared to leading economies, Brazil invests less in R&D and registers fewer patents

## National expenditure on R&D

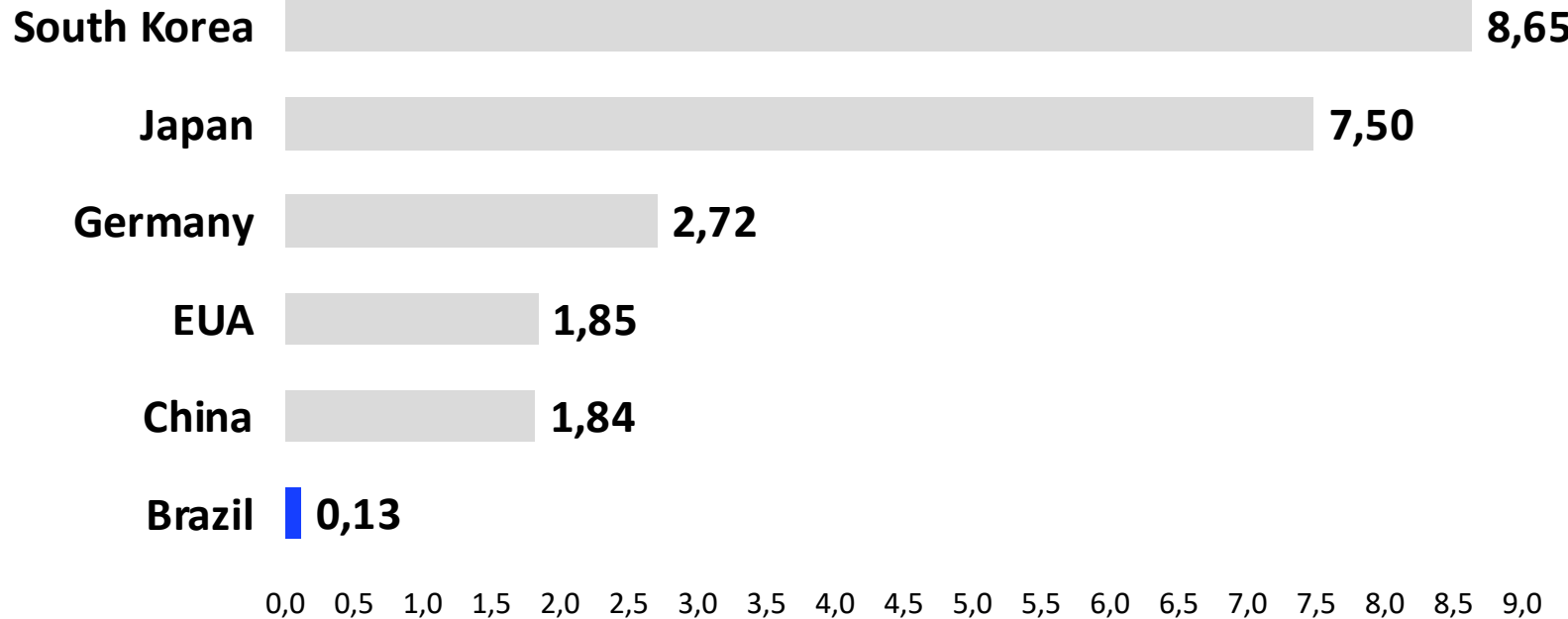
% of GDP · 2023



Brazil allocates just **1.19% of GDP** to R&D, less than half the average of the leading innovation economies.

## International patent applications (PCT) per GDP

Applications per USD 1 billion of GDP (PPP) · 2024



Brazil records just **0.13 PCT applications per billion of GDP** – 66 times less than South Korea and 14 times less than China

### IMPLICATIONS Why this matters

01

Brazil **converts little R&D into scalable innovation**, with low transfer of science to industry.

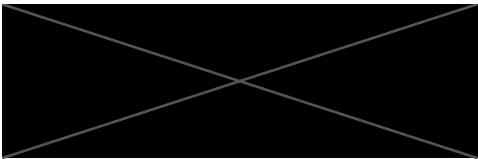
02

**Reliance on government funding** limits the speed and scale of national innovation.

03

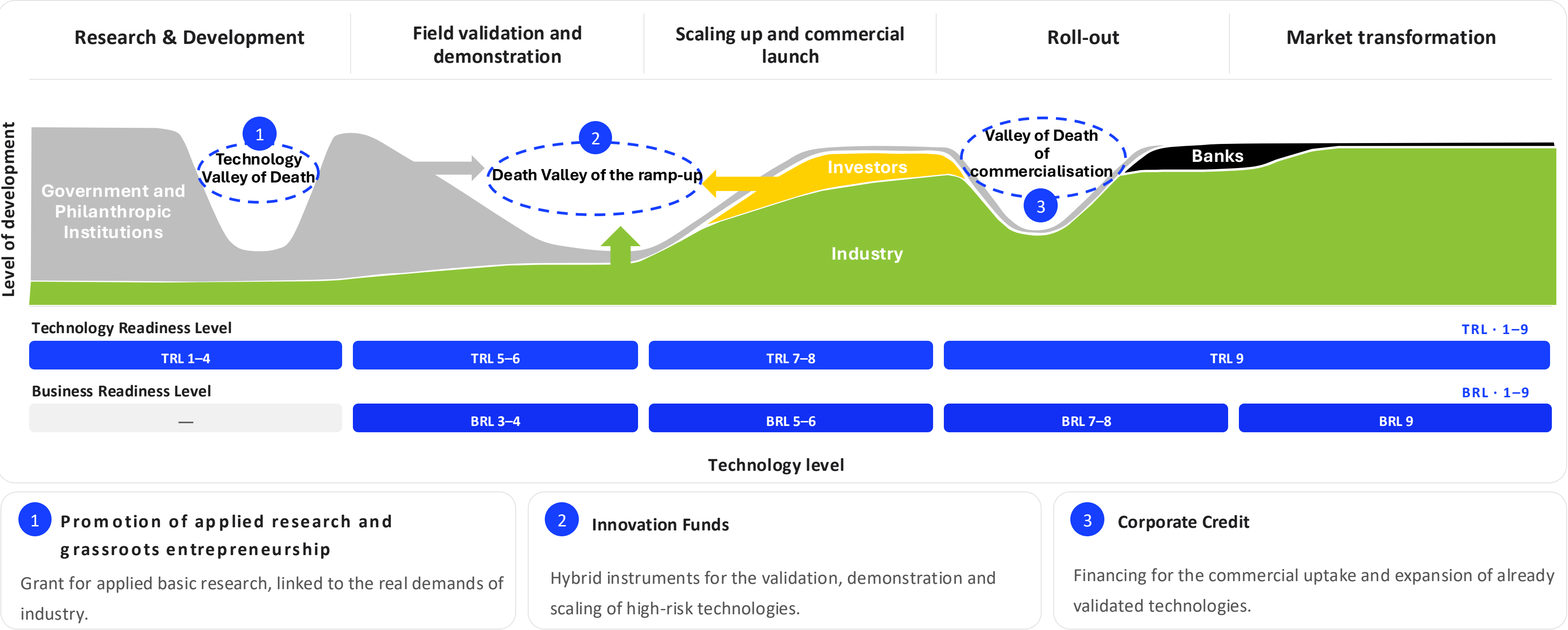
**Private capital must be mobilised** to transform science into technology on a competitive scale.





# The 5th Auction combines three complementary instruments to address the main bottlenecks to innovation in Brazil

Level of involvement of different stakeholders throughout the innovation journey



TRL and BRL are independent scales ranging from 1 to 9. A project may advance in TRL without having reached the equivalent BRL — e.g. a technical pilot at TRL 7 may still be at BRL 5.

Source: adapted from Arun (2024) — TRL: Technology Readiness Level · BRL: Business Readiness Level





# The 5th Eco Invest Auction draws on international programs that combine technology funding with debt and guarantee mechanisms

Small Business Investment Company (SBIC)



**Mechanism:** Leveraged public-private fund

The federal government licenses and provides capital to private investment funds. The funds invest in innovative startups and SMEs and, at the end of the cycle, repay the public capital with interest and distribute returns to private investors.

Israel Innovation Authority (IIA)



**Mechanism:** Conditional Grant

Finances 20% to 50% of R&D costs without diluting shareholders. The company only repays the support, via royalties on revenue, if the project succeeds commercially. If the technology fails, there is no charge.

European Investment Bank (EIB) / InvestEU



**Mechanism:** Debt + guarantee + hybrid instruments

Long-term financing backed by an EU budget guarantee, which absorbs first losses in case of failure. Independent assessment of each project; individual failures are considered acceptable within an innovation portfolio.

Korea Technology Finance Corporation (KOTEC)



**Mechanism:** Public guarantee

Replaces physical collateral with an assessment of the company's technological potential. With KOTEC's guarantee, innovative SMEs can access private bank credit without offering assets as collateral and without direct state subsidy.

Technology Development Board (TDB)



**Mechanism:** Concessional debt

Loans at below-market interest rates with repayment terms compatible with technology maturation timelines. Focus on bridging research and market in emerging economies, without the government taking ownership or control of financed companies.

Sources: DOE, IIA, EIB, KOTEC e TDB

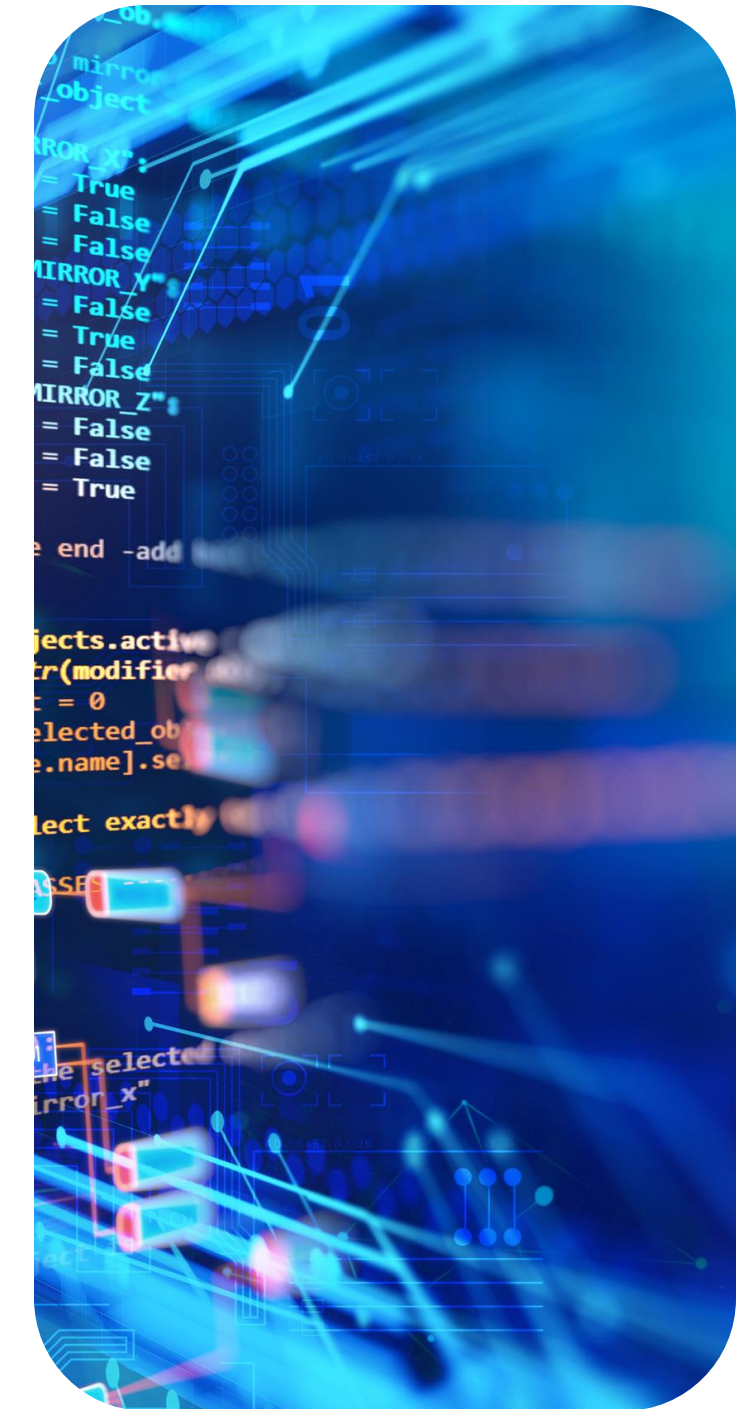


Brazil has high potential for **innovation**, but still faces

- low levels of investment in new technologies;
- low levels of collaboration between companies and universities;
- low levels of technology-based entrepreneurship

In this context, the **5th Auction** emerges: an opportunity to unlock this potential and strengthen innovation through three complementary financial instruments.

- 1 Innovation funds**, catalytic capital to mitigate private investor risk and scale up new technologies
- 2 Corporate credit**, for companies that have already adopted validated clean technologies and wish to scale up
- 3 Promoting applied research and technology-based entrepreneurship**, linked to the real needs of industry





# Convergence State, market, companies and innovation systems



\*STI: Science, Technology, and Innovation (STI) Centers



# Value chains to accelerate innovation and competitiveness in Brazil



**Green Fertilizers,  
Bio-inputs and  
Alternative  
Proteins**



**Advanced Green  
Fuels, Biogas and  
Biomethane**



**Automation and AI  
for Production and  
Technological  
Processes**



**Battery Systems  
and Processing of  
Critical Minerals**



**Green Chemistry  
and Biomaterials**



**Circularity of mineral  
and industrial waste  
for inputs**



**Advanced Green Fuels,  
Biogas and Biomethane**

**Sustainable Aviation Fuel (SAF) and Marine Biofuels**

Production and scaling of sustainable fuels with proven emissions reductions throughout the life cycle.

**Low-Carbon Synthetic Fuels (e-fuels)**

A combination of low-emission hydrogen and captured carbon, enabling the replacement of fossil-based derivatives in sectors where electrification is difficult.

**Biogas, Biomethane and Biomass Systems for Thermal Generation**

Applications in transport, industry and thermal power generation, enhancing energy efficiency and energy security

**Green Fertilizers, Bio-inputs  
and Alternative Proteins**

**Biological Inputs for Soil Nutrition and Health**

Production and scaling of biofertilizers, biostimulants and other biological solutions aimed at improving soil fertility

**Biopesticides and Biological Solutions for Crop Protection**

Development and scaling of biological control agents and integrated pest and disease management solutions

**Alternative Proteins**

Development, scaling and industrialisation of alternative proteins and functional ingredients through biotechnology, precision fermentation and plant-based platforms



# Acceleration of strategic chains: Green Fertilizers

**8%**

of global fertilizer  
consumption is  
accounted for by the  
Brazilian market

*Source: MAPA*

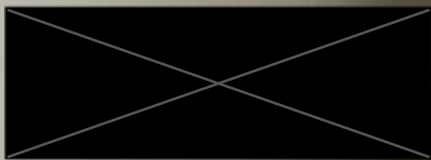


**80%**

of the fertilizers we  
consume are  
imported

*Source: MAPA*





## **Battery Systems, Processing of Critical Minerals and Electric Vehicles**

### **Batteries and Energy Storage Systems (BESS)**

Development, production and integration of batteries for electric mobility and stationary storage, enhancing the flexibility of the electricity system and the decarbonisation of transport.

### **Electric vehicles**

Manufacture and assembly of light and heavy electric land, air and sea vehicles, promoting the decarbonisation of transport and the strengthening of the domestic industry.

### **Critical Minerals and Strategic Materials**

Extraction, processing and transformation of critical minerals and advanced materials essential to the energy transition and green reindustrialisation.

## **Green Chemistry and Biomaterials**

### **Renewable and Low-Carbon Chemical Feedstocks**

Production and scaling of chemical feedstocks from renewable or low-carbon sources, replacing fossil raw materials and enabling new sustainable industrial pathways.

### **Biopolymers, Bioplastics and Advanced Materials**

Development and scaling up, with high value-added industrial applications and the replacement of conventional plastics.

### **Circular Design, Sustainable Packaging and Supply Chain Integration**

Design of materials and products with a focus on circularity, traceability and environmental compliance, promoting waste reduction and closing production cycles.



## Automation and AI for Production and Technological Processes

### AI for Genetic Improvement

Analytical automation and digital solutions to accelerate genetic improvement processes, increasing efficiency, precision and speed in the development of desirable traits in biological and production systems.

### Green Infrastructure

Advanced automation and AI, focusing on energy efficiency, emissions reduction and integration with renewable sources.

### Data-Driven Spatial Planning and Climate Adaptation

Automation of territorial planning, climate risk analysis and decision support for resilient urban infrastructure.

### MRV, Traceability and Climate-Digital Compliance

Automation and digitisation of processes for measurement, reporting and automated verification of emissions, natural resource use, circularity and socio-environmental impacts.

## Circularity of mineral and industrial waste for inputs

### Management and Recovery of Municipal Solid Waste

Technological and industrial solutions for the collection, recycling and reverse logistics of post-consumer waste, reducing landfill disposal and reintroducing materials into production cycles.

### Mineral Waste Management and Recovery

Treatment, reuse and recovery of waste from mining and mineral processing, with a focus on reducing environmental liabilities, recovering economic value and reintegrating materials into production cycles through low-impact industrial pathways.

### Management and Recovery of Industrial and Biological Waste

Treatment and reuse of industrial waste, promoting resource efficiency, emission reduction and low-impact production pathways.



# Acceleration of strategic chains: Circular Economy and AI

**97%**

of solid waste in Brazil  
is **not** recycled

*Source: Ministry of the Environment*



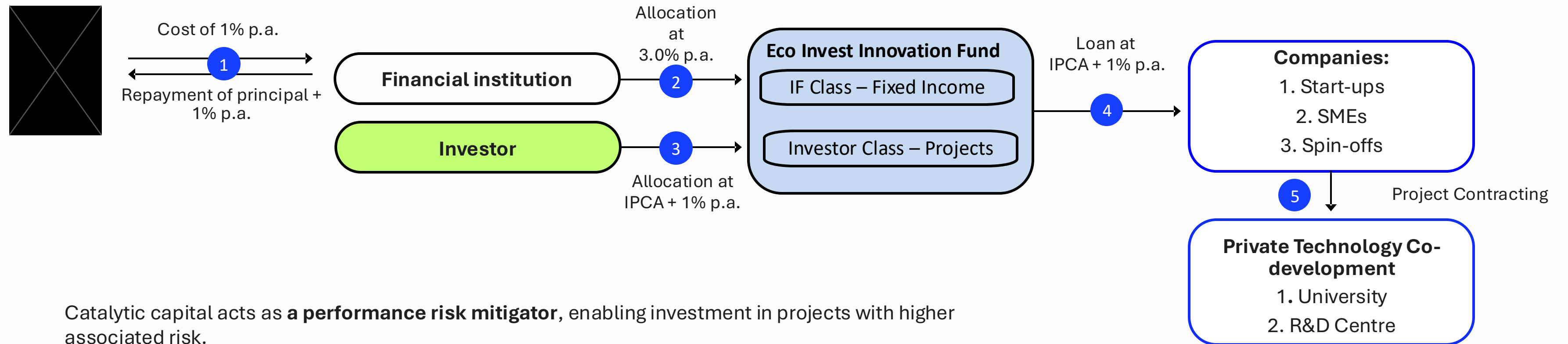
**5%**

of global energy emissions  
could be cut by adopting AI  
by 2035

*Source: International Energy Agency*



# 1. Structure and operation of the Innovation Funds



## Strategic approach to accelerate priority sectors for Brazil

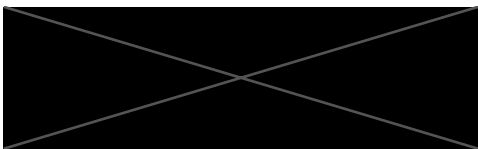
Should the new projects supported by the programme generate better-than-expected results, **a portion of the surplus will be shared with the National Treasury.**

The fund may use instruments such as **convertible loans and/or venture debt**, allowing it to combine a minimum return with a stake in the success of the investee company.

**At least 10%** of the Fund's portfolio investments must be in projects developed in partnership with universities and STIs, or **the acquisition of companies** with relevant R&D&I projects outside the country.

The fund will focus on projects with a Technology Readiness Level (**TRL**) of **1 to 7** or a Business Readiness Level (**BRL**) of **3 to 6**, aimed at the validation, demonstration and development of innovative solutions.



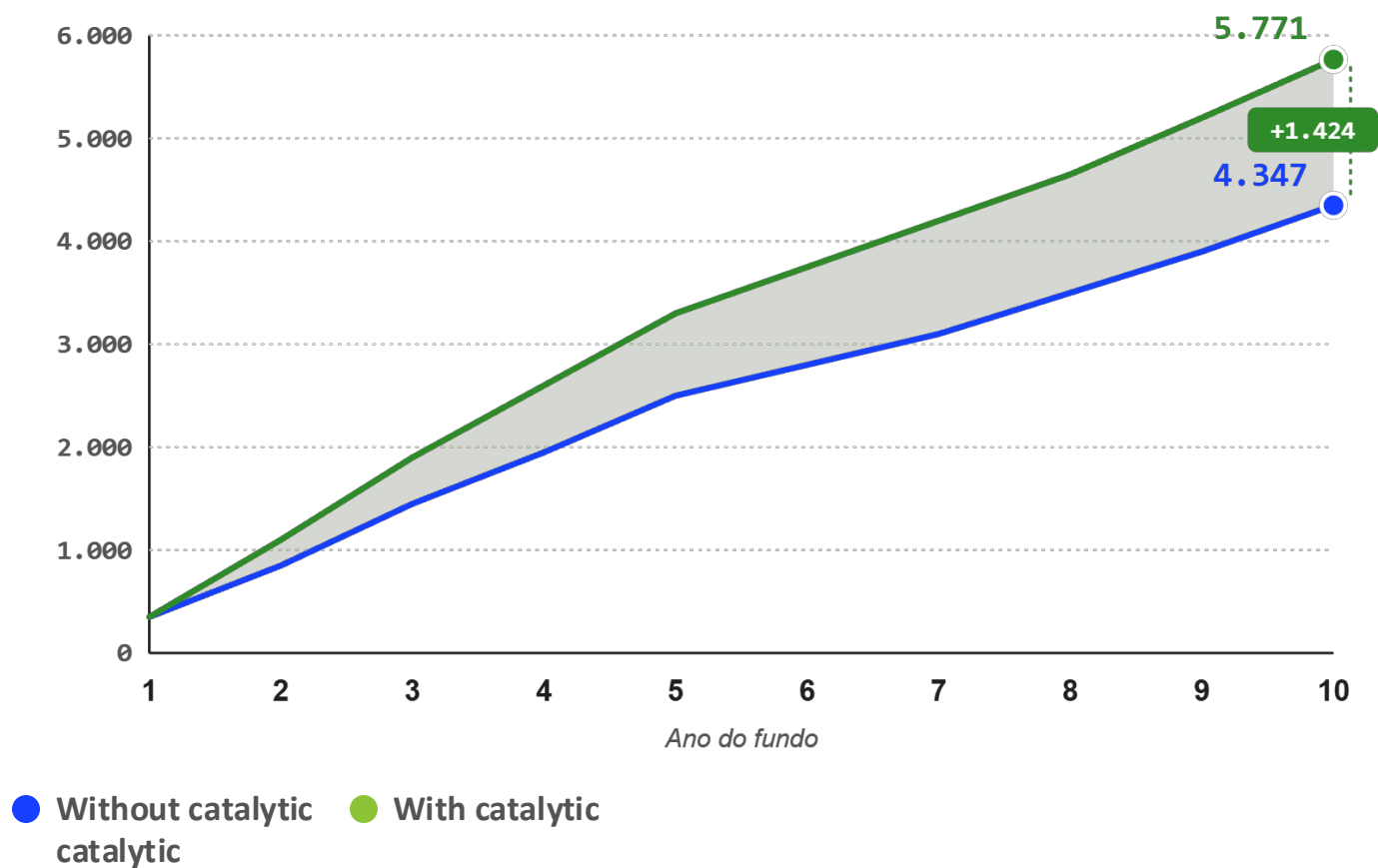


# Benefits of Innovation Funds

The instrument that transforms the risk of innovating in Brazil into an investment opportunity

## Total fund value

R\$ million · over 10 years · with vs. without catalytic capital



## Difference in the fund’s annualised internal rate of return (IRR)

% IRR · without vs. with catalytic capital, by portfolio default scenario

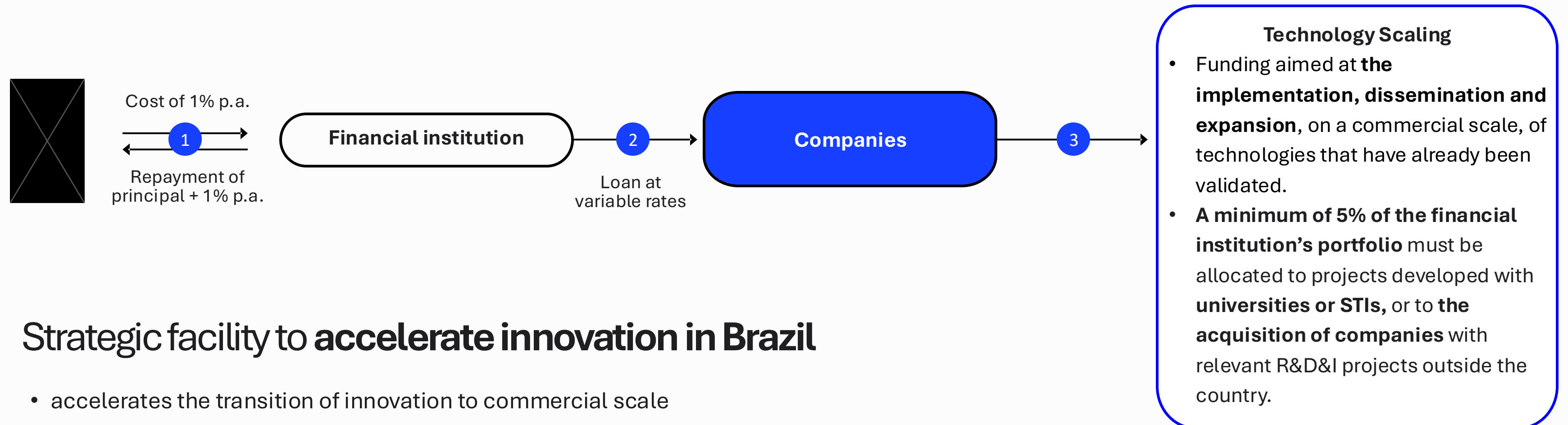
| Portfolio Default | Without Catalytic | With Catalytic      |
|-------------------|-------------------|---------------------|
| 0% loss           | 25.0%             | 27.7%<br>+2.7 p.p.  |
| 50% drop          | 16.5%             | 19.6%<br>+3.1 p.p.  |
| 75% drop          | 9.0%              | 12.9%<br>+3.9 p.p.  |
| 100% drop         | -23.5%            | -5.4%<br>+18.1 p.p. |

- **Catalytic capital protects the portfolio** against losses, boosts the fund’s total return and secures capital for the companies that make the most progress.
- **If the fund performs better than expected**, the excess return on the **catalytic capital can be returned to the programme**.
- In the event of a **50% failure rate** among projects, Eco Invest funds **increase the return** on investment by around **36%**.

Assumptions: catalytic capital R\$ 1.5 billion · 1x leverage (private capital R\$ 1.5 billion) · projects yield IPCA+20% · 10% annual write-off · gradual allocation: 20% of private capital per year over the first 5 years · catalytic capital yields the Selic rate.



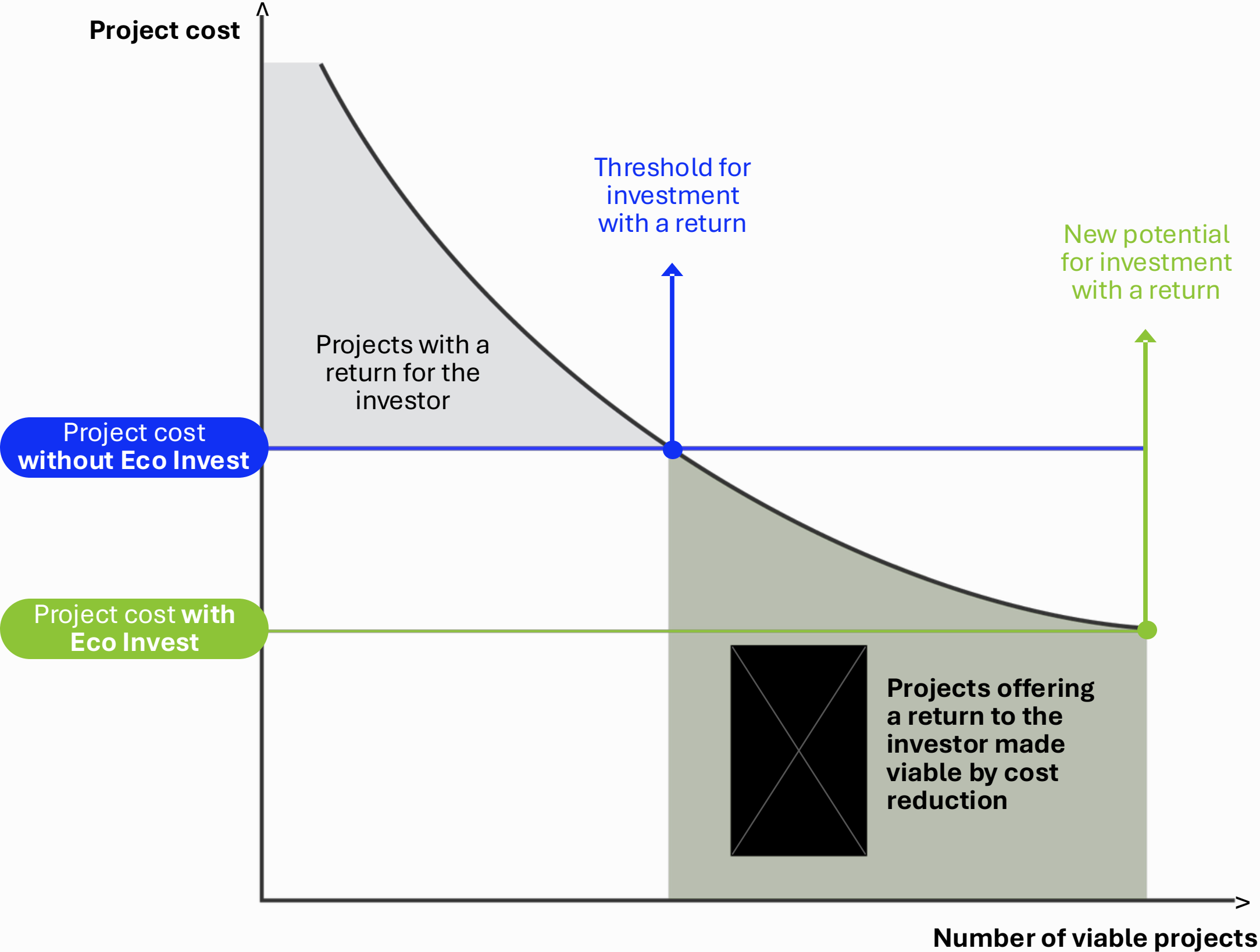
## 2. Structure and operation of the corporate credit mechanism



### Strategic facility to **accelerate innovation in Brazil**

- accelerates the transition of innovation to commercial scale
- enhances competitiveness, productivity and international integration
- Mobilisation of private capital for large-scale technology diffusion
- strengthens strategic, low-carbon industrial chains
- encourages cooperation between companies, universities and research centres on technological scalability
- Focus on projects with TRL 7 to 9 or BRL 7 to 9



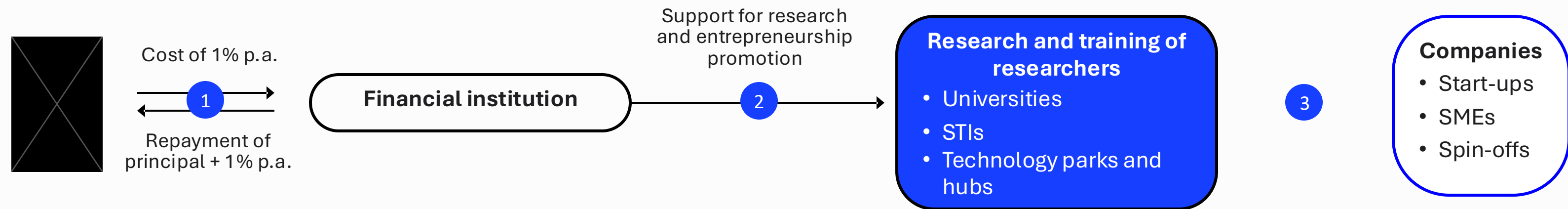


# Benefits of the corporate credit line for innovative companies

- **Takes projects from the pilot stage to market**, bridging the gap between the testing phase and commercial operation
- **Reduces risk at the most critical moment**, providing capital at a lower cost and with an appropriate timeframe when investment is highest and demand is still emerging
- **Accelerates the arrival of new technologies in society** by enabling project expansion, shortening the time between innovation and large-scale adoption



### 3. Structure and operation of the support mechanism for applied research and entrepreneurship



**0.5% of total funds** will be allocated annually to **the promotion of applied research and entrepreneurship**

**At least 25% of these funds** must be allocated to **the promotion of technology-based entrepreneurship**

### Strategic initiative to promote applied research and technology-based entrepreneurship

- strengthens the country's scientific and technological base, sustaining the national capacity to generate and absorb innovation in the long term
- brings knowledge and the productive sector closer together, connecting companies, universities and research centres to the concrete needs of the economy
- develops proprietary technologies in strategic sectors, reducing external dependence and expanding Brazil's technological sovereignty

*\*calculated based on the unamortised catalytic balance + private funds mobilised*



# PROMOTING ENTREPRENEURSHIP BASED ON TECHNOLOGY

Capital opportunities for **researchers to develop ideas in a market-integrated manner**, accelerating technological development and adding value to Brazilian production chains.



# Auction Criteria



## 1. Leverage of the Innovation Fund

- Fixed amount of R\$ 1.5 billion with **minimum leverage of 1x and maximum of 2x**

## 2. Higher Corporate Credit amount (leverage x catalytic volume)

- Minimum amount of R\$ 100 million and maximum of R\$ 1 billion, with a **minimum leverage of 3x**

## 3. % of funding for partnerships with universities and STIs and/or the acquisition of international technology-based companies

- Advantage for Financial Institutions (FIs) that exceed the minimum of 10% in projects developed with Universities and STIs or the acquisition and internalisation of technology from international technology-based companies

## 4. Foreign capital participation

- IFs offering a higher percentage of foreign capital above the minimum of 15% (up to a limit of 45%) will have an advantage

## Availability of catalytic capital

up to R\$ 2.5 billion for  
each value chain



# Priorities of the design

Eco Invest Innovation Funds may adopt allocation strategies via **convertible debt and/or venture debt**

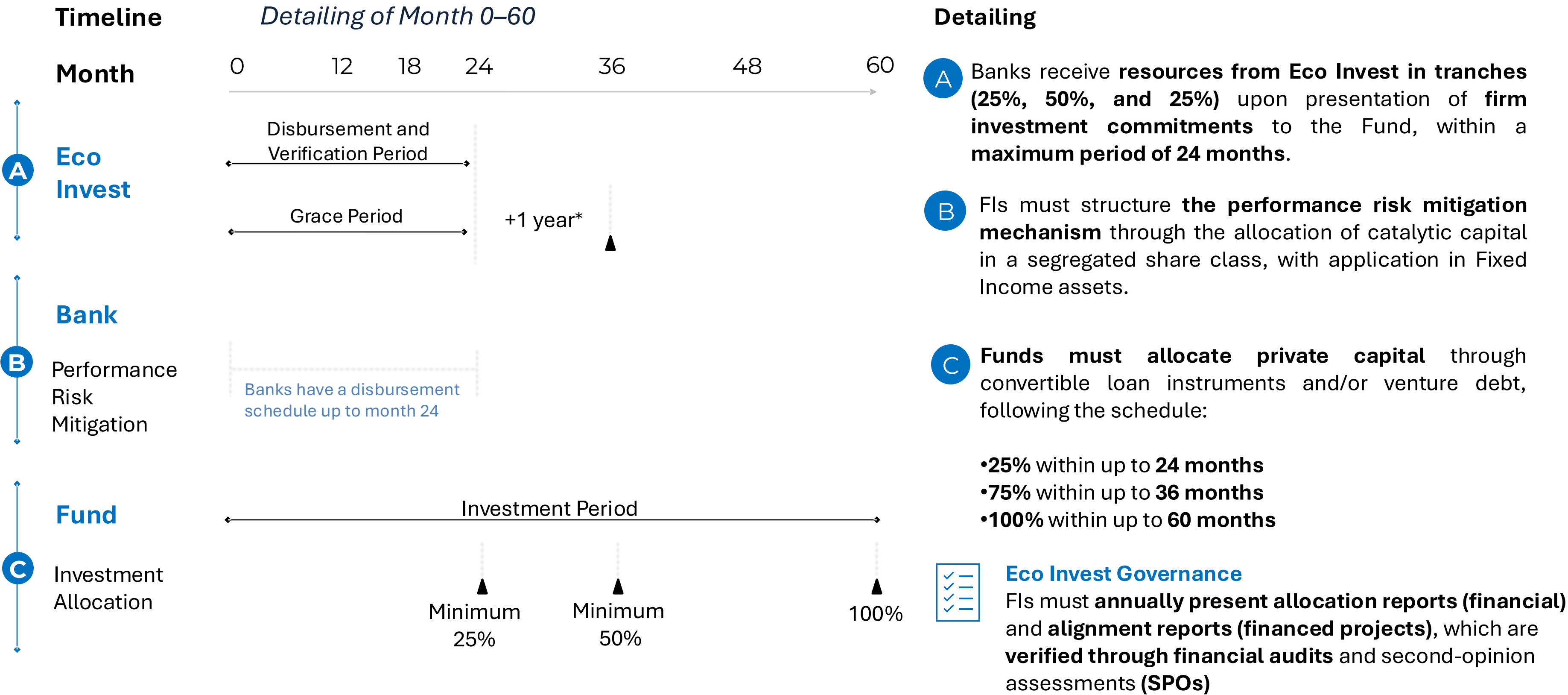
At least **10% of the Fund's portfolio** must consist of **portfolio companies that commission research from universities and STIs** or **acquire companies** with relevant R&D&I projects outside the country.

**At least 5%** of the financial institution's portfolio in the Corporate Credit line must be **allocated to commissioning research from universities and STIs**

**Consortia between financial institutions from different countries** may be prioritised, with a view to strengthening international cooperation and accelerating innovation in Brazil



# Disbursement and Capital Allocation - Fund





# Disbursement and Capital Allocation - Corporate Credit

## Timeline

(Detailing of Month 0-36+)

### Month

0 12 18 24 36+

### Eco Invest

Disbursement and Verification Period

Grace Period

+1 year\*

### Bank – Mobilization and Disbursement

1st tranche

2nd tranche

3rd tranche

Proof of Mobilization and Disbursement of the 1st Tranche

Proof of Mobilization and Disbursement of the 2nd Tranche

Proof of Mobilization and Disbursement of the 3rd Tranche

### Bank - MRV

Investment Period

Monitoring Reports

1st Financial and Allocation Report

2nd Financial and Allocation Report

3rd Financial and Allocation Report

Annual Alignment Report to Eco Invest

Annual Financial and Allocation Report

## Detailing

**A** Banks receive **resources from Eco Invest in tranches (25%, 50%, and 25%)** upon proof of private capital mobilization and disbursement to projects.

**B** The mobilization of private capital and disbursement of resources to projects shall comply with the following timeline: **25%** within 12 months of initial receipt, **an additional 50%** within 18 months, and **the remaining 25%** within 24 months.

**C** At each verification of capital mobilization and disbursement, the Bank shall submit a Financial and Allocation Report. Once all resources have been allocated, the Bank must annually submit both the Alignment Report and the Financial and Allocation Report.

### Eco Invest Governance

FIs must **annually present allocation reports (financial)** and **alignment reports (financed projects)**, which are **verified through financial audits** and second-opinion assessments (**SPOs**)



Find **out more**  
about Eco Invest Brazil

