



TESOURO NACIONAL

2026

Eco Invest Brasil

*5th Auction - Accelerating Innovation
for National Competitiveness*



Eco Invest Brasil

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⁺

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

Source: OECD

26%

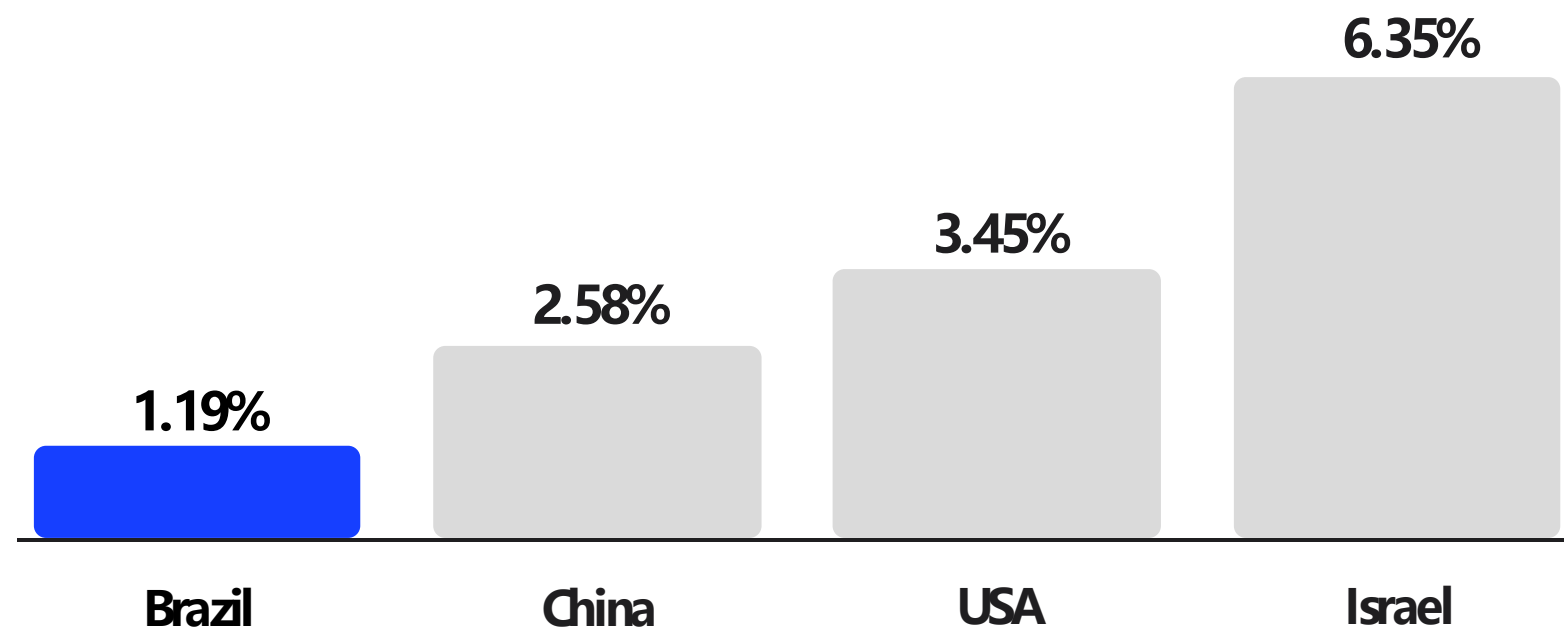
**OF RESEARCHERS IN BRAZIL ARE
IN THE PRIVATE SECTOR. IN
COUNTRIES LEADING IN
INNOVATION, THIS FIGURE
EXCEEDS 70%**

Source: OECD and MCTI

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

National expenditure on R&D

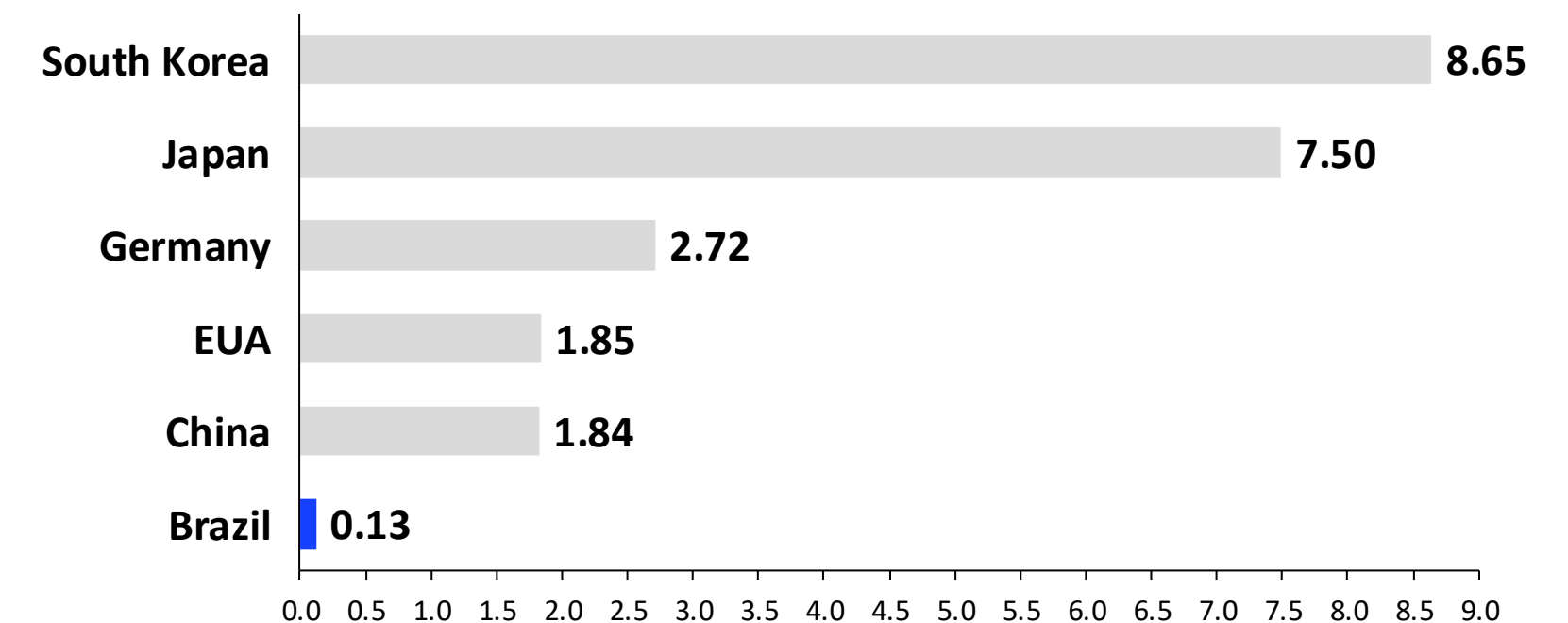
% of GDP · 2023



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

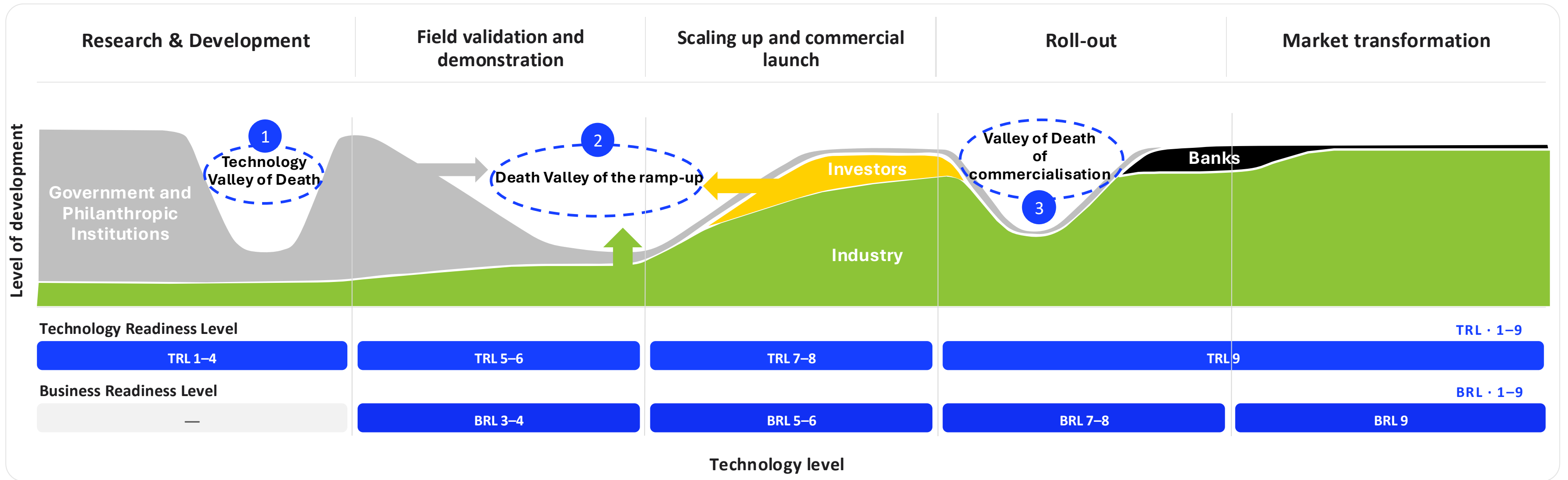
Reliance on government funding limits the speed and scale of national innovation.

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



1 Promotion of applied research and grassroots entrepreneurship

Grant for applied basic research, linked to the real demands of industry.

2 Innovation Funds

Hybrid instruments for the validation, demonstration and scaling of high-risk technologies.

3 Corporate Credit

Financing for the commercial uptake and expansion of already validated technologies.

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.

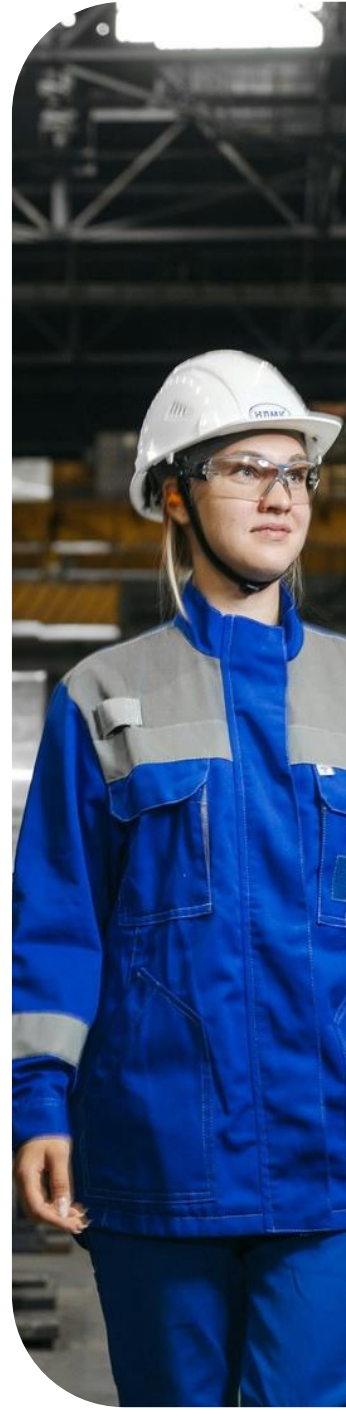
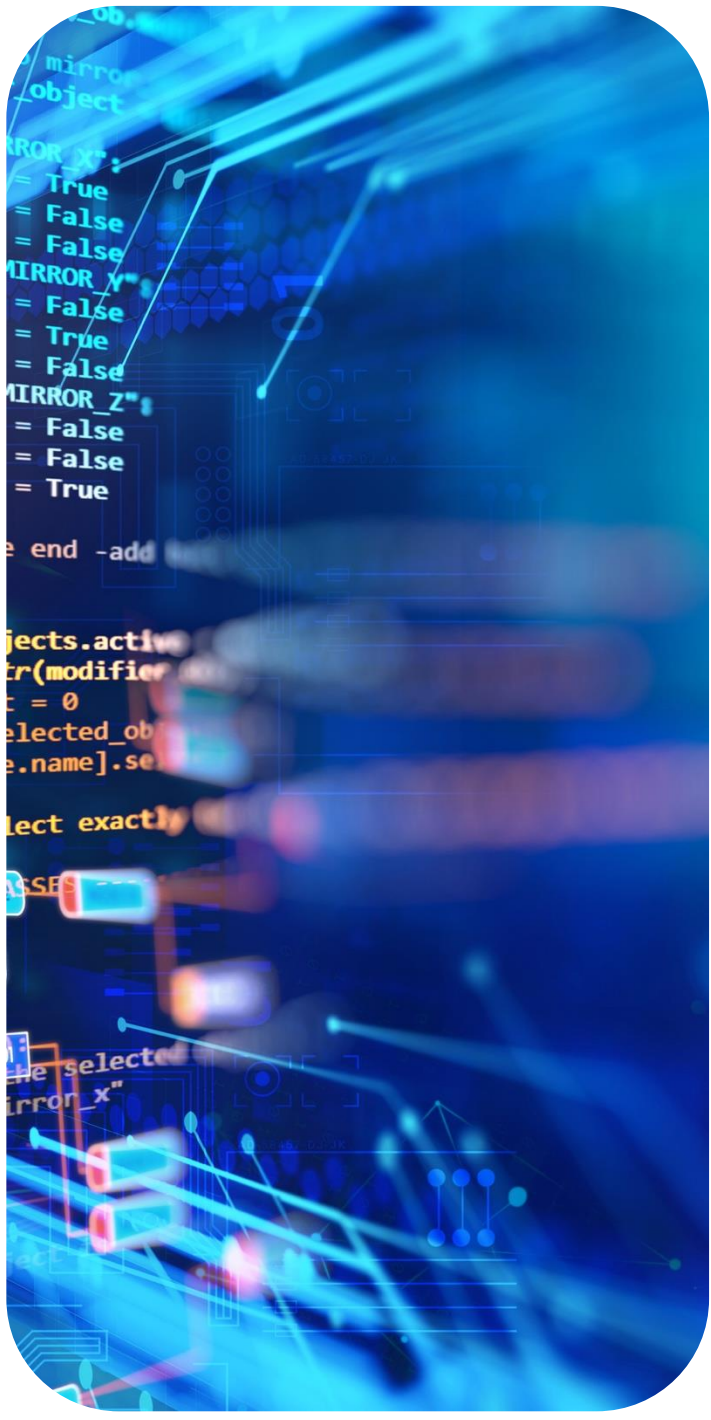
Source: adapted from Arun (2024) — TRL: Technology Readiness Level · BRL: Business Readiness Level

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

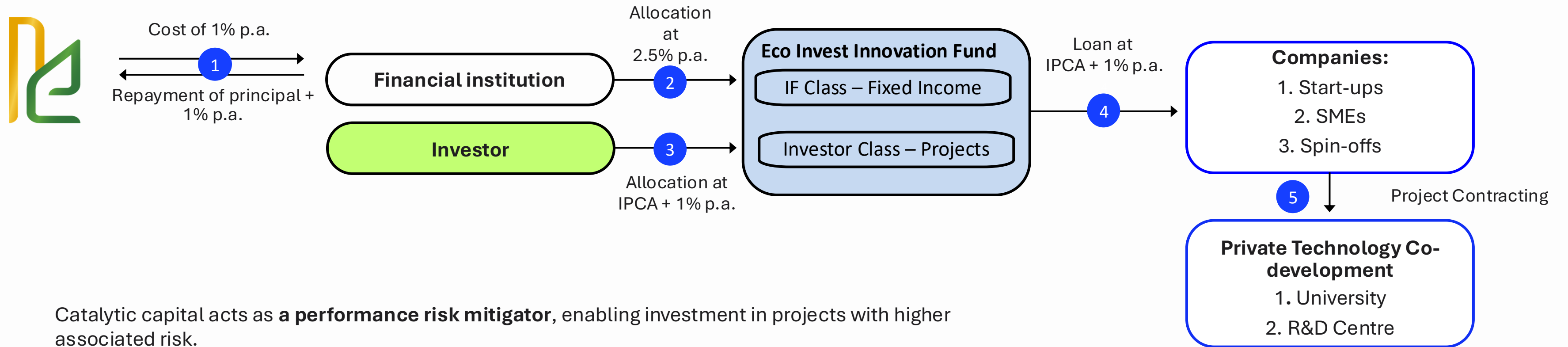


5%

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

Source: International Energy Agency

1. Structure and operation of the Innovation Funds



Catalytic capital acts as a **performance risk mitigator**, enabling investment in projects with higher associated risk.

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.

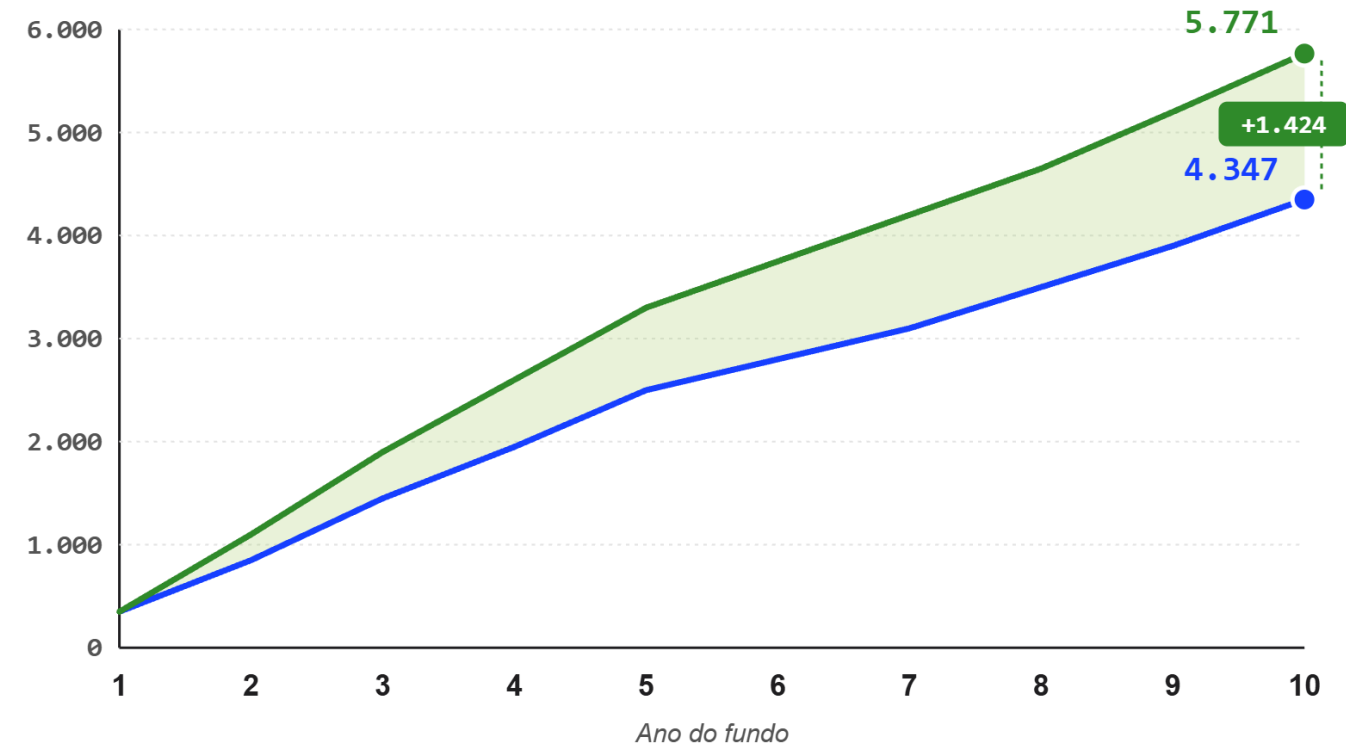
The fund will focus on projects with a Technology Readiness Level (**TRL**) of **1 to 7** or a Business Readiness Level (**BRL**) of **3 to 6**, aimed at the validation, demonstration and development of innovative solutions.

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



● Without catalytic capital ● With catalytic capital

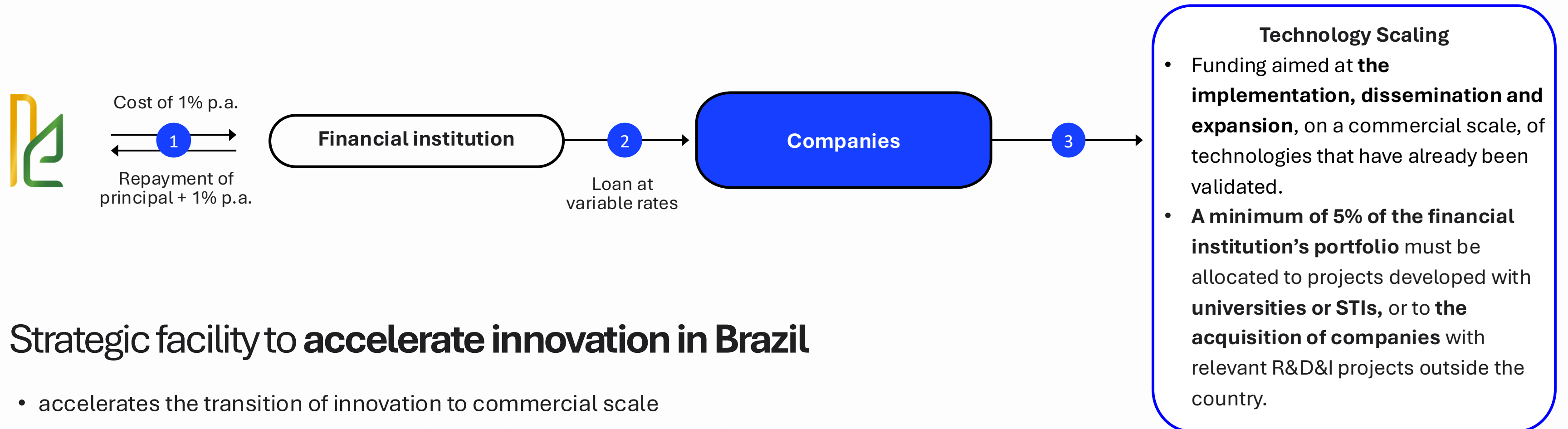
Difference in the fund's annualised internal rate of return (IRR)

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

PORTFOLIO DEFAULT	WITHOUT CATALYTIC	WITH CATALYTIC
0% loss	25.0%	27.7% +2.7 p.p.
50% drop	16.5%	19.6% +3.1 p.p.
75% drop	9.0%	12.9% +3.9 p.p.
100% drop	-23.5%	-5.4% +18.1 p.p.

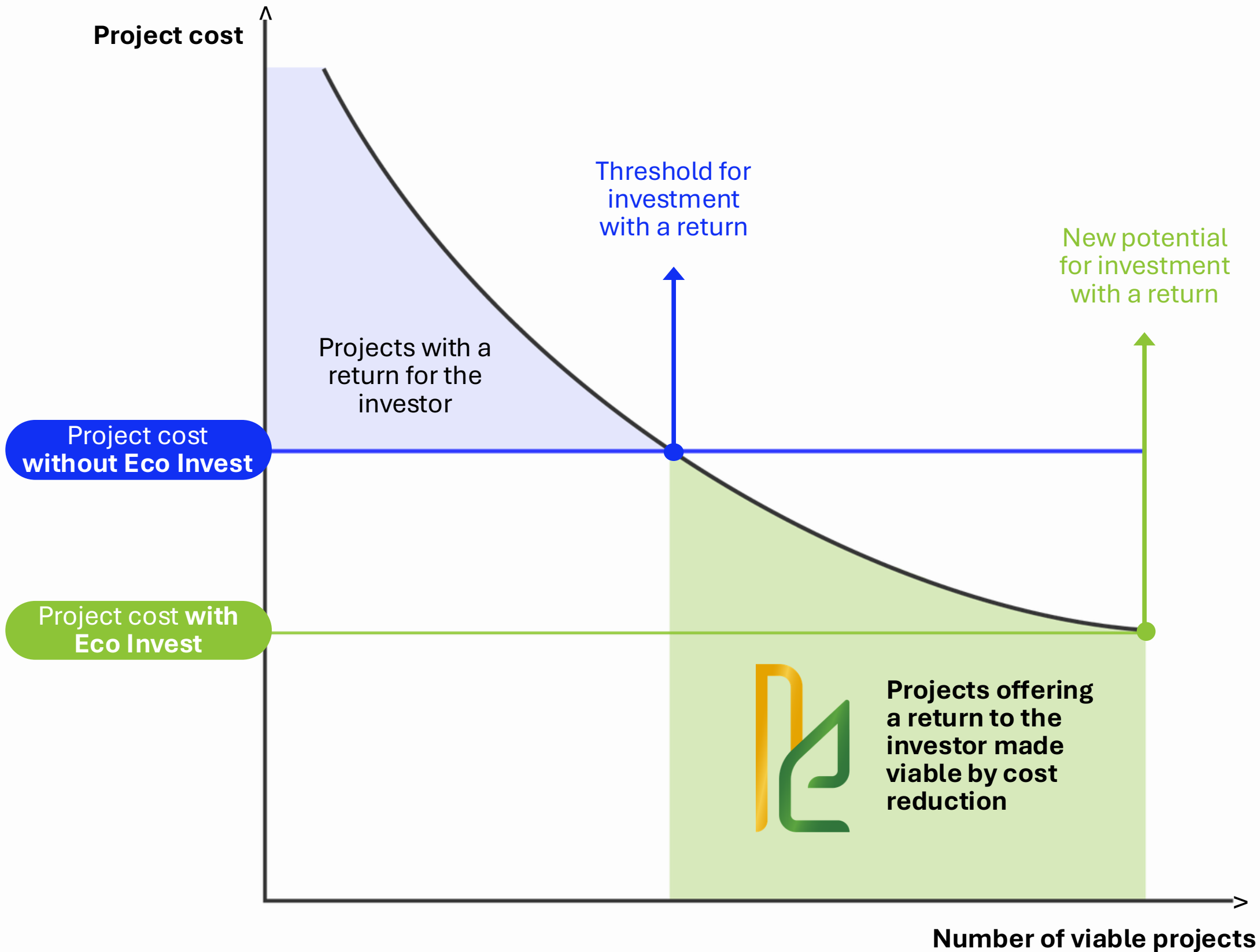
- **Catalytic capital protects the portfolio** against losses, boosts the fund's total return and secures capital for the companies that make the most progress.
- If the fund performs better than expected, the excess return on the **catalytic capital can be returned to the programme**.
- In the event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

2. Structure and operation of the corporate credit mechanism



Strategic facility to accelerate innovation in Brazil

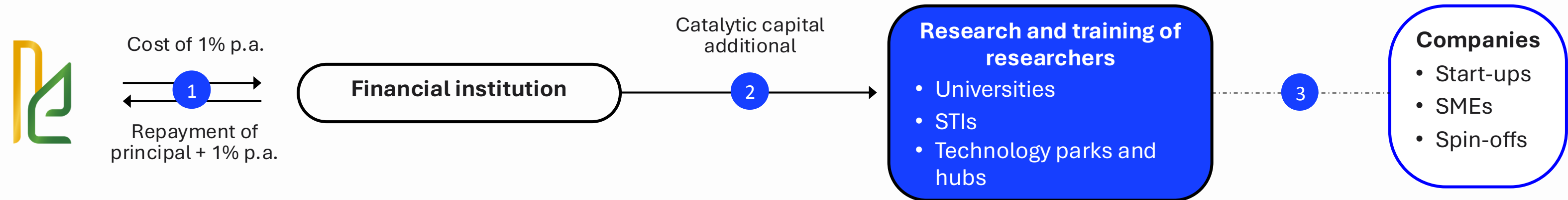
- accelerates the transition of innovation to commercial scale
- enhances competitiveness, productivity and international integration
- Mobilisation of private capital for large-scale technology diffusion
- strengthens strategic, low-carbon industrial chains
- encourages cooperation between companies, 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

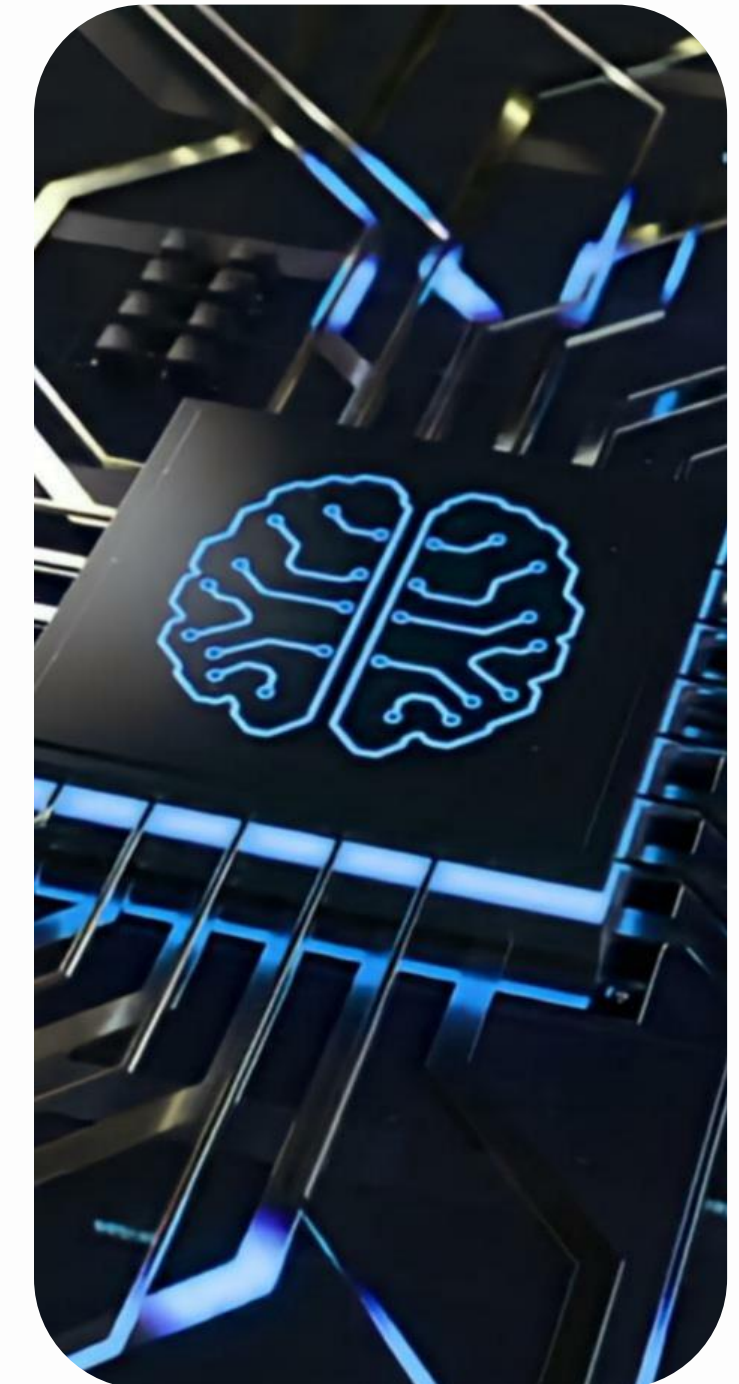
Priorities of the design

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





 Eco Invest Brasil

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MEIO AMBIENTE E
MUDANÇA DO CLIMA

MINISTÉRIO DA
FAZENDA

GOVERNO DO
BRASIL
DO LADO DO POVO BRASILEIRO

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