

AECM ANNUAL EVENT

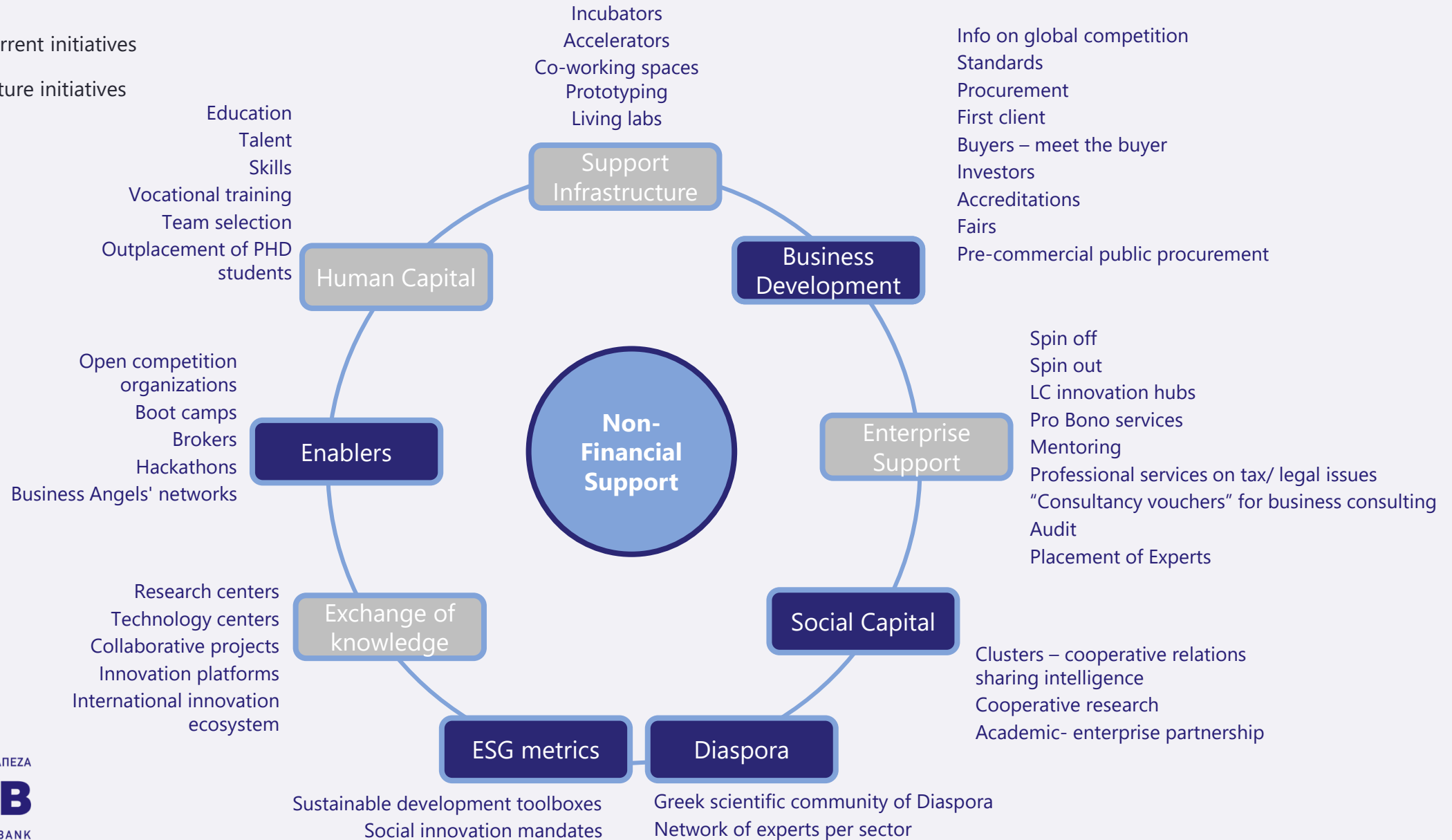
June 2023

ΕΛΛΗΝΙΚΗ ΑΝΑΠΤΥΞΙΑΚΗ ΤΡΑΠΕΖΑ



HELLENIC DEVELOPMENT BANK

Non-Financial support is a vibrant ecosystem by itself with many satellite activities



Innovation Loan

Innovation Guarantee Fund

Loan Purpose

Strengthening the **competitiveness** and **extroversion** of Greek entrepreneurship by supporting the implementation of Research and Development for innovative ideas, products and practices (goods or services)



Beneficiaries

- Start -ups
- Small- Medium-sized enterprises (SMEs)
- Innovative enterprises

Eligibility Criteria

A broad selection i.e. OR Elevate Greece Registry OR benefited from previous Research/ innovation /technological advancement, State Aid support programs



Guarantee Rate: 80%

Loan amount : up to €400K

Max collaterals : <20% of loan value

A Hybrid tool

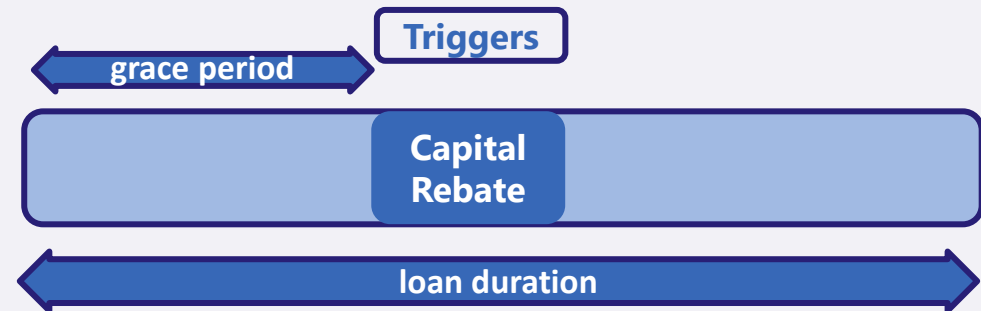
A part of the loan is converted into a **grant** –the use of the grant partly pays back the loan



Grant Rate Capital Rebate

15%+5% =**20%** triggered upon success of **INNOVATION & ESG CRITERIA**

Grant claim procedure



Loan duration: 10 years with up to 3Y grace period

State AID: De Minimis

InnoAgora

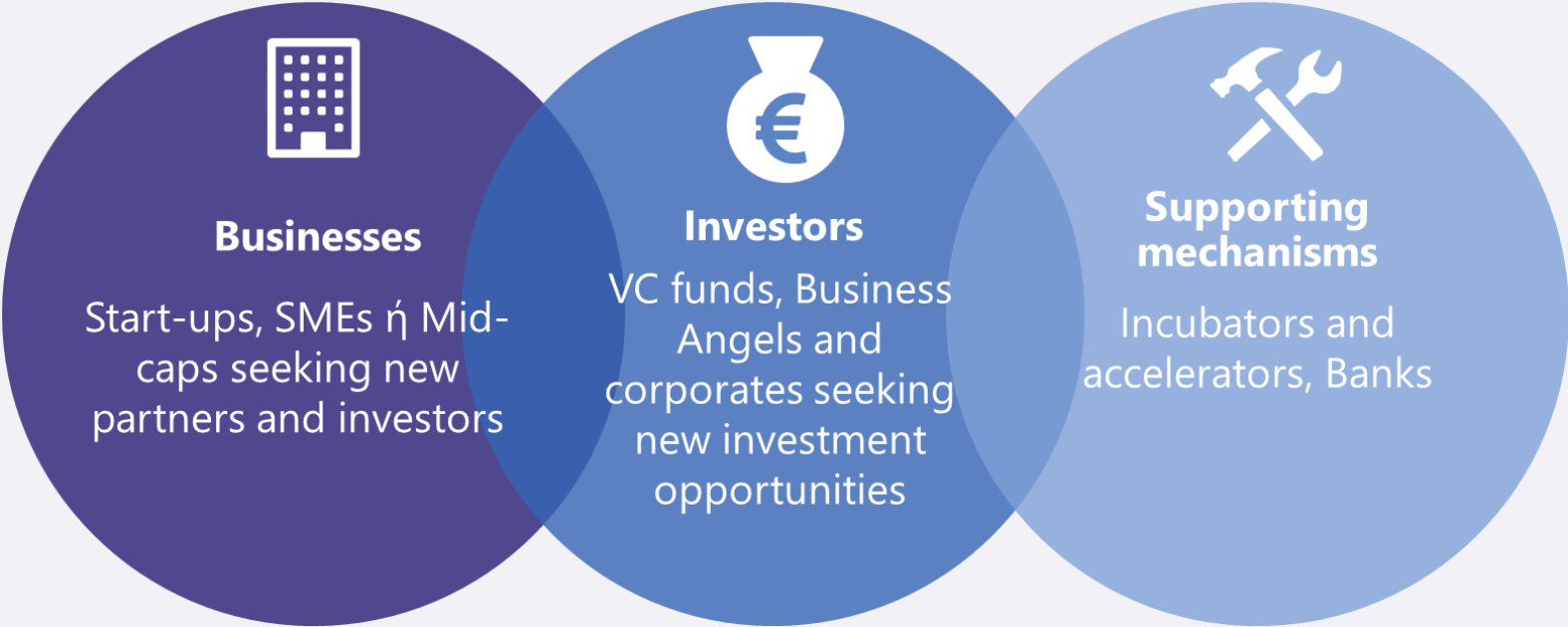
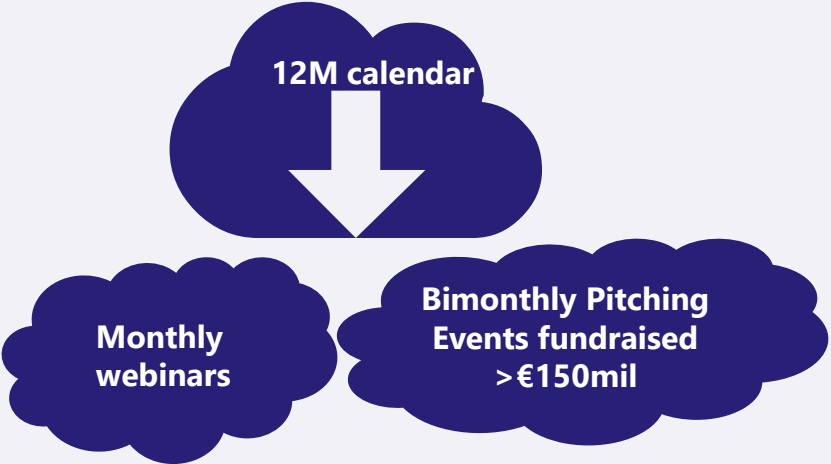
InnoAgora

InnoAgora a dynamic digital platform that provides real networking opportunities contributing to international business development

A matchmaking platform enabling 3 different groups of participants to enter into investment agreements & commercial partnerships



Creating an
Online Profile
for free



InnoAgora is hosted in two internationally renowned platforms:

euromoney

The French platform of
Bpifrance

- 18.000+ enterprises
- 2.800+ investors
- 2.000+ supporting mechanisms



36.000+ enterprises
37.000+ investors

V-Next

The Chinese gateway of
Shenzhen Stock
Exchange

- 18.000+ enterprises
- 26.000+ investors
- 8.000+ funds

**Monthly
webinars**

**Bimonthly Pitching
Events fundraised
>€150mil**



ESG Innovation Challenge



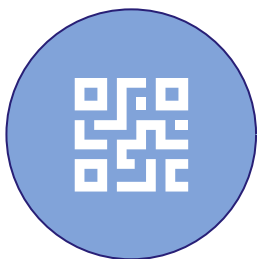
In quest of increasing SME Bankability



**Bringing qualitative and quantitative input together,
in an assessable - measurable - weighable way**

HDB's exposure to the ecosystem

Digital transformation



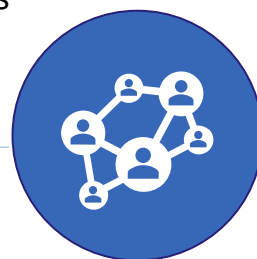
- **Product development** alternative scoring, front/back office
- **Data analytics** MIS, BI tools
- **Digital platforms:** Further educate

HDB seeks to create PoCs (via **subcontracting**) that will offer alternative scoring methodology

- Startups
- Banks
- Universities
- Consulting firms
- VCs + supportive Organizations

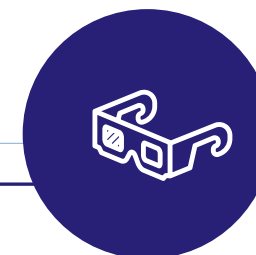


PoCs



Ecosystem

Validated



Validated by



NATIONAL DOCUMENTATION CENTRE

+ UATested

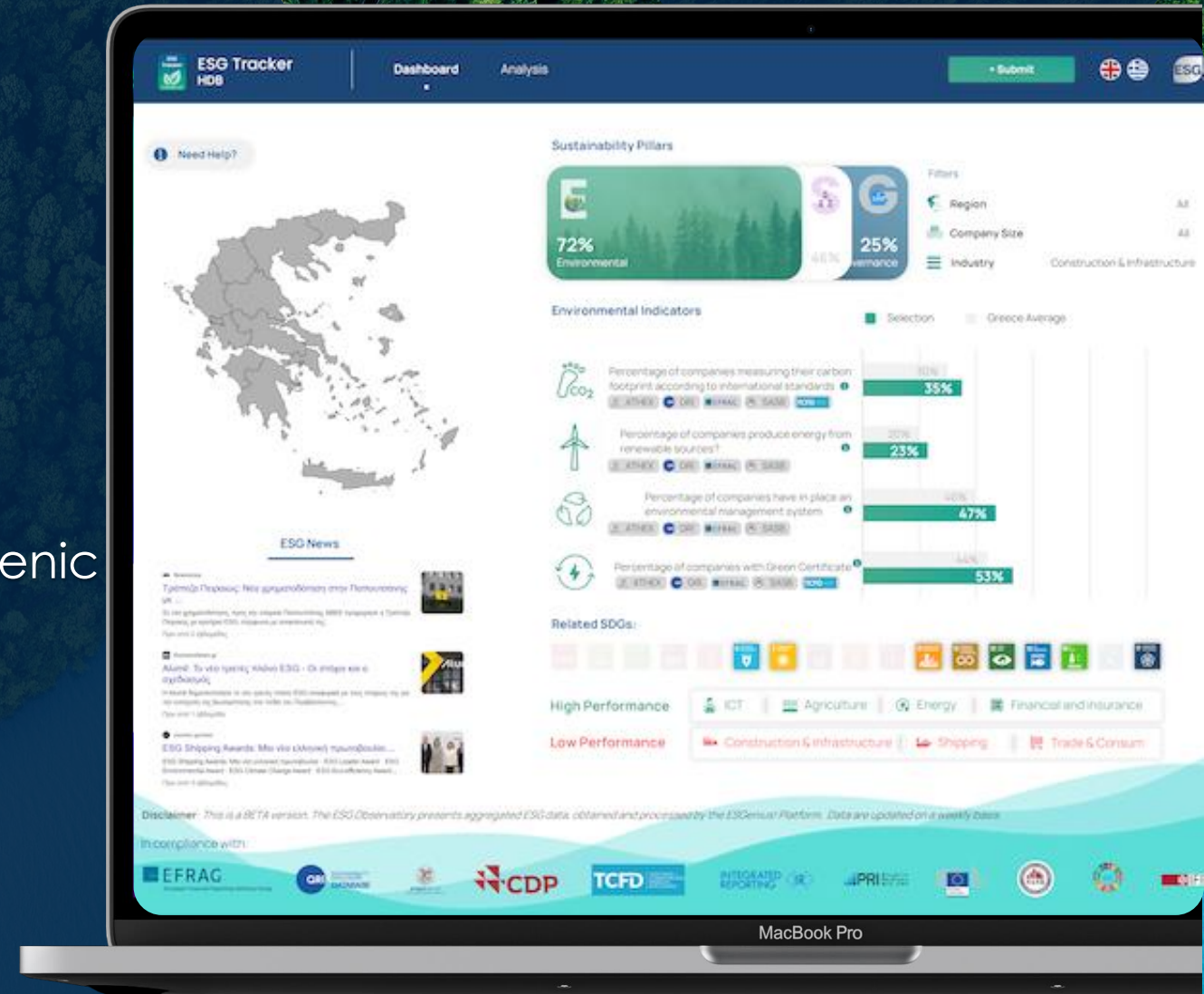


ESG scoring



ESG Tracker by HDB

The first National Observatory for Small and Medium-sized Enterprises (SMEs) by the Hellenic Development Bank (HDB)



Why ESG Tracker by HDB?



ESG Tracker by HDB Performance Report

Upon verification of your submissions to ESG Tracker by HDB, you will receive a Performance Report in PDF format reflecting your ESG performance.



Awareness-building and training

Providing information, training, and promoting awareness among employees about ESG issues and sustainable practices.



Business Process Optimization

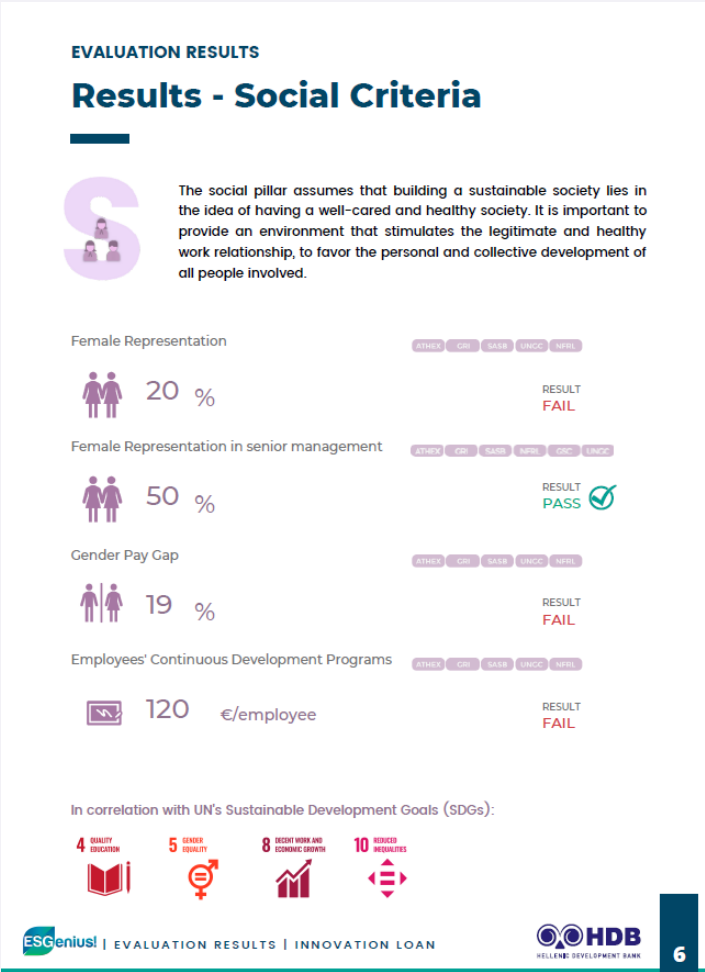
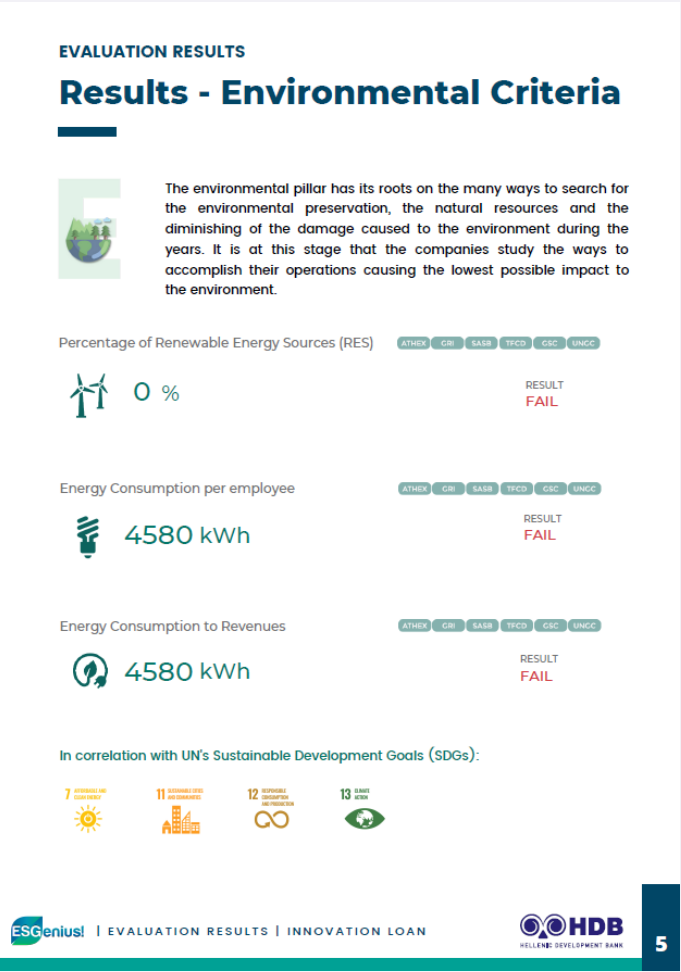
Enhancing day -to day practices that contribute to strategic planning and yield sustainable results for the user's organization.



Monitoring progress

Integrating ESG criteria with financial information provides stakeholders-including customers, investors, financial institutions, credit rating agencies and social institutions-with a comprehensive view of the company, enhancing its effectiveness.

Automated evaluation based on ESG criteria



ESG Tracker by HDB-Report





powered by  HDB

SOFIA
Innovation Scoring

Innovation scoring



RENNVIS
RESEARCHING VISIONS

A Data-Driven Decision Support System
to Automate Innovation Scoring Process
in the Financial Sector

Why?



Market Gap

- Financial institutions base Credit Scoring mostly on historical Company data
- Innovative startups/Early Scale ups with no history and no positive EBITDA cannot access funding



How to close it?

- Provide a supplementary Scorecard
- Add Scorecard to existing Credit Scoring Methodology
- Incorporate forward-looking KPIs based not only on pure financial data/indicators



The goal

- Remodel** qualitative data into quantifiable metrics
- Create appraisal algorithms for innovative business plans that bear good chances of scalability and success



A forward looking scoring also linked to the risk aversion algorithms used by Financial Institutions

Objective

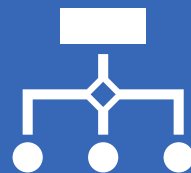
Improve **Access** to
Funding (SMEs,
Startups) & Increase
Bankability



Provide **Complete**
Innovation Scoring **tool**
(Banks, Funds, VCs,
Evaluation Platforms,
Registries)



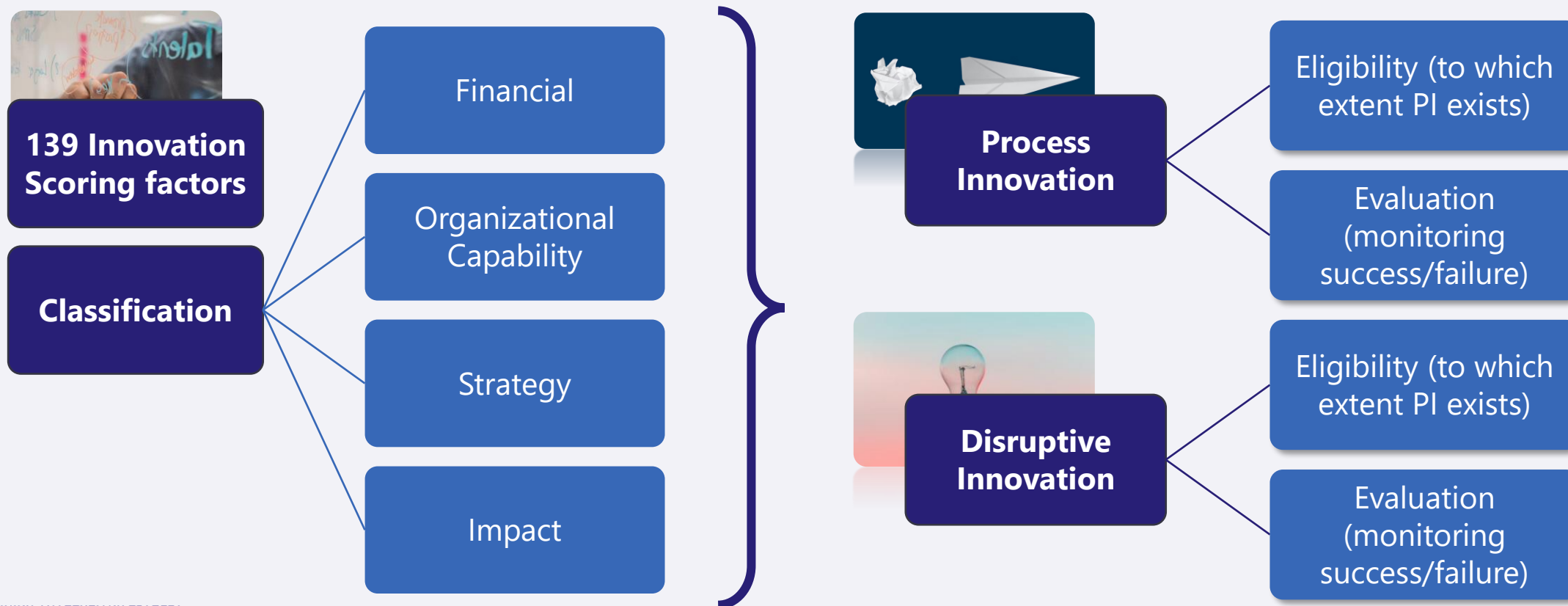
Introduce New,
Alternative/
Supplementary
Process (Credit &
Investment Evaluation)



Provide **Data Exchange**
with External Sources,
Analyze & Add Value
to Existing Company
Data



Innovation Scoring Factors & Models



Innovation scoring models – factors/weights - example

Factor	Weight	Factor Type	Source	Metric Main	Metric Sub-Categ	Calculation method	0	1	2	3	4	5	6	7	8	9	10
Revenue generated by innovations/Total Revenue	9	evaluation	Financial Statements	Financial	Revenue	Innovative Products Revenue/Revenue	0% 1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	
New-products-to-margin (NPM) conversion	8	evaluation	Financial Statements	Financial	Revenue	[Gross Margin of Innovative Products/Gross Sales]/[(C	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
R&D-to-product (RDP) conversion	8	evaluation	Financial Statements	Financial	Revenue	[Gross Sales of Innovative Products/Gross Sales]/[R&	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Gross margin of product innovation / Gross margin of standard portfolio	7	evaluation	Financial Statements	Financial	Revenue	Gross Margin of Innovative Products/Gross Margin	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50% or more	
Estimated sales value of product innovation / sales value of standard portfolio	7	eligibility	Business Plan + Financial St	Financial	Revenue	Forecast of Innovative Product Gross Sales/Gross Sal	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50% or more	
Percentage of revenue from products or services introduced in the past 3 years	8	eligibility	Manual Input + Financial St	Financial	Revenue	New Product Revenue/Revenue (3 Years Base)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Change in sales revenue from the previous year	7	eligibility	Financial Statements	Financial	Revenue	X year Revenue - X-1 year Revenue/X year Revenue	0% or less	1-3%	4-6%	7-9%	10-12%	13-15%	16-18%	19-21%	22-24%	25-27%	28-30%
R&D investment as a share of total investments of the firm	6	eligibility	Financial Statements	Financial	Return on Investm	R&D Investments/Investments (Previous Year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Share of research budget from total company budget	6	eligibility	Manual Input	Financial	Expenditure	R&D Budget/Budget (Current Year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Percentage spent on R&I of total operating costs in the previous year	6	eligibility	Financial Statements	Financial	Expenditure	R&I Expenses/OPEX (Previous Year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Percentage spent on R&I out of the loan amount since the first loan withdrawal	5	evaluation	Financial Statements	Financial	Expenditure	R&I OPEX/Loan Amount (Previous Year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Percentage of staff with higher education diploma or above	7	eligibility	Manual Input	Organization: Team		Higher Education Staff/Staff (Current Year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Percentage of employees who have received training and tools for Innovation	7	eligibility	Manual Input	Organization: Team		Trained on Innovation Staff/Staff (Current Year)	0% 1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	
R&D personnel ratio	5	eligibility	Manual Input	Organization: Team		R&D Staff/Staff (Current Year)	0% 1-2%	3-4%	5-6%	7-8%	9-10%	11-12%	13-14%	15-16%	17-18%	19-20% or more	
Number of awards, publications on Innovation	7	eligibility/ev	Manual Input	Organization: Technical ability		Number (Previous Year)	0		1		2		3		4		5 or more
Project feasibility expressed by Technology Readiness Level	8	eligibility	Manual Input	Organization: Technical ability		Number	N/A	0	1	2	3	4	5	6	7	8	9
Number of introduced new product/process/marketing/organizational innovations	6	eligibility	Manual Input	Organization: Technical ability		Number (Previous Year)	0 1 to 2	3 to 4	5 to 6	7 to 8	9 to 10	11 to 12	13 to 14	15 to 16	17 to 18	19-20 or more	
Percentage of “outside” vs. “inside” inputs to the innovation process (open innovation %)	6	eligibility	Manual Input	Organization: Tools and Process	%		0% 1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	
Percentage of ideas generated in collaboration with customers	5	eligibility	Manual Input	Strategy	Opportunities	%	0% 1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	
Word of mouth referrals e.g. social media presence, influence	5	eligibility	Manual Input	Impact	Market	%	0% 0,1-0,2%	0,3-0,4%	0,5-0,6%	0,7-0,8%	0,9-1%	1,1-1,2%	1,3-1,4%	1,5-1,6%	1,7-1,8%	1,9-2% or more	
Referral rates e.g. pre-ordering, market testing	5	eligibility	Manual Input	Impact	Market	%	0% 0,1-0,2%	0,3-0,4%	0,5-0,6%	0,7-0,8%	0,9-1%	1,1-1,2%	1,3-1,4%	1,5-1,6%	1,7-1,8%	1,9-2% or more	
Have been designated in the past 3 years as an innovative company (e.g. award, prize) by an EU/national/regional institution or	8	eligibility	Manual Input	Strategy	Awareness	True/False	FALSE										TRUE
Have received in the past 3 years innovation support/funding from European or national/regional schemes	8	eligibility	Manual Input	Strategy	Financing	True/False	FALSE										TRUE
The organization has received funding from accelerators/investors/business angels/VCs during the last 3 years	8	eligibility	Manual Input	Strategy	Financing	True/False	FALSE										TRUE
Will use the financing to enter a new product or geographical market	5	eligibility	Business Plan	Impact	Sustainability	True/False	FALSE										TRUE
Will use the financing to develop innovative products/processes/services	6	eligibility	Business Plan	Impact	Sustainability	True/False	FALSE										TRUE
Number of canceled innovation projects / total number of innovation projects	6	eligibility	Manual Input	Impact	Market	Number of canceled innovation projects / Number of	91-100%	81-90%	71-80%	61-70%	51-60%	41-50%	31-40%	21-30%	11-20%	1-10%	0%
Intangible assets (registered trademarks, patents, industrial designs, etc.) percentage on Net assets	6	eligibility	Financial Statements	Financial	Technical ability	Intangible Assets/Total Assets (Previous year)	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	
Royalty and licensing income from patents/intellectual property rights compared to total income	6	eligibility	Financial Statements	Financial	Revenue	Royalty and licensing Income/Revenue (Previous Year	0% 1-5%	6-10%	11-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	

Screenshots

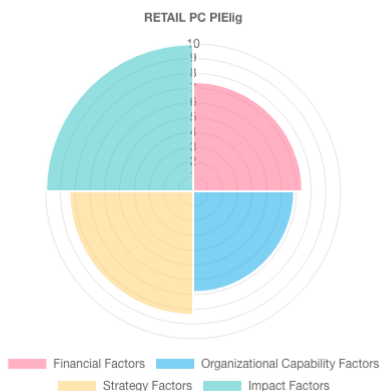
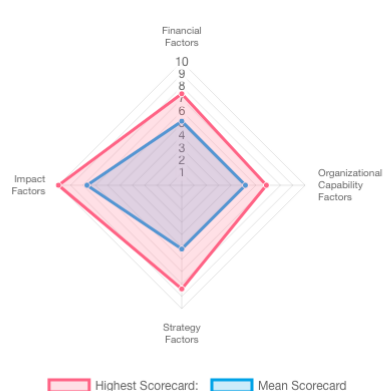
Innovation Scoring Data Analysis & Insights

RETAIL PC

Overview

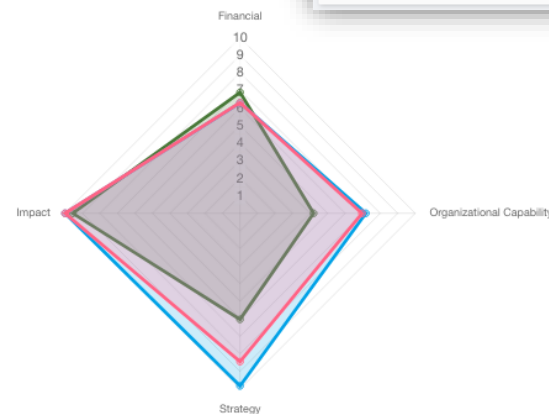
Number of Scorecards: 6

Highest Scorecard: **RETAIL PC PIElig**
Total Score: 8.17 Risk Evaluation: Low



Innovation Scorecard Aggregation & Comparison

RETAIL PC PIElig CONSULTING GROUP PIElig



Benchmarking

Model: Process Innovation Evaluation Select two or more Scorecards to compare [Compare](#)

<input checked="" type="checkbox"/>	Name	Creation Date	Score	Risk
<input checked="" type="checkbox"/>	RETAIL PC PIElig	2022-09-08	7.93	Low
<input checked="" type="checkbox"/>	CONSULTING GROUP PIElig	2022-09-08	8.32	Low
<input checked="" type="checkbox"/>	ICT IKE PIElig	2022-09-08	6.67	Below average

1-3 of 3 [1](#) 10 / page

Aggregation table ⓘ

Section	RETAIL PC PIElig	CONSULTING GROUP PIElig	ICT IKE PIElig	Aggregation data
Financial	6.3	6.29	6.89	6.49
Organizational Capability	6.96	7.18	4.2	6.11
Strategy	8.45	9.83	6.04	8.11
Impact	9.99	9.99	9.55	9.84
Total score	7.93	8.32	6.67	7.64

Innovation Score Reference: 7.64 ▲ Medium score ⓘ

Data Insights and Added Value



Identify which Innovation Scorecard **factors** should be **increased**, to **improve** a Company's Innovation Score



Identify the **risk level** of investing into a Company, based on a company's innovation Scorecard



Identify which of the provided Company Data is **required** and most important to **predict** Innovation Score at an early stage

Z-Score + Innovation Score

Calculate Z-Score and Innovation Score Combination (ZIN)

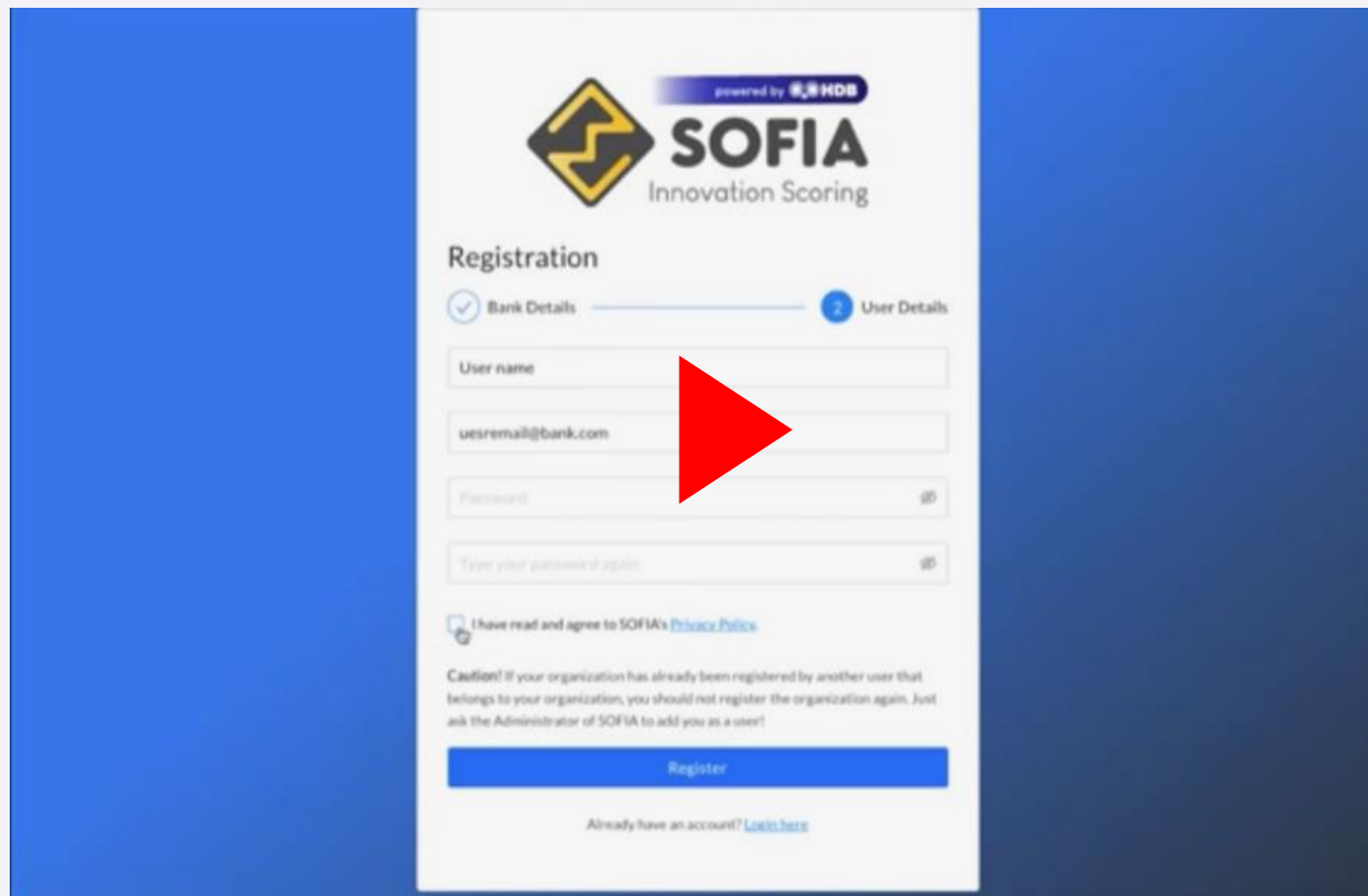
Scorecards created with Model: **ZIN Scoring Model**

Name	Creation Date	Innovation Score	Risk	Z-Score	ZIN	
	2023-05-04	5.01	Average	1.75 Distress	4.69	Set Z-Score
	2023-05-04	5.18	Average	3.50 Safe	6.96	Set Z-Score
	2023-05-04	7.97	Low	1.85 Grey	6.30	Set Z-Score



Annotations:

- Estimate Innovation Risk (points to Risk column)
- Show Z-Score Zones (points to Z-Score column)
- Set Z-Score (points to Set Z-Score link)
- Calculated Innovation Score (points to Innovation Score column)
- Calculated Combined Score (ZIN) (points to ZIN column)

SOFIA Short Demo Video



The image shows a registration form for SOFIA Innovation Scoring, powered by HDB. The form is titled "Registration" and has two steps: "1 Bank Details" and "2 User Details". The "User Details" step is active. The form includes fields for "User name", "User email" (pre-filled with "uesremail@bank.com"), "Password", and "Type your password again". There is a checkbox for "I have read and agree to SOFIA's [Privacy Policy](#)". A caution message states: "Caution! If your organization has already been registered by another user that belongs to your organization, you should not register the organization again. Just ask the Administrator of SOFIA to add you as a user!". A blue "Register" button is at the bottom, followed by a link: "Already have an account? [Login here](#)". A large red play button is overlaid on the form.

 powered by  **SOFIA**
Innovation Scoring

Registration

✓ Bank Details ————— 2 User Details

User name

uesremail@bank.com

Password

Type your password again

☐ I have read and agree to SOFIA's [Privacy Policy](#)

Caution! If your organization has already been registered by another user that belongs to your organization, you should not register the organization again. Just ask the Administrator of SOFIA to add you as a user!

[Register](#)

Already have an account? [Login here](#)

Validated



NATIONAL DOCUMENTATION CENTRE

Presented



ΕΛΛΗΝΙΚΗ ΕΝΩΣΗ
ΤΡΑΠΕΖΩΝ

Under Testing

ΤΡΑΠΕΖΑ ΠΕΙΡΑΙΩΣ



ΠΑΓΚΡΗΤΙΑ ΤΡΑΠΕΖΑ

Future activities

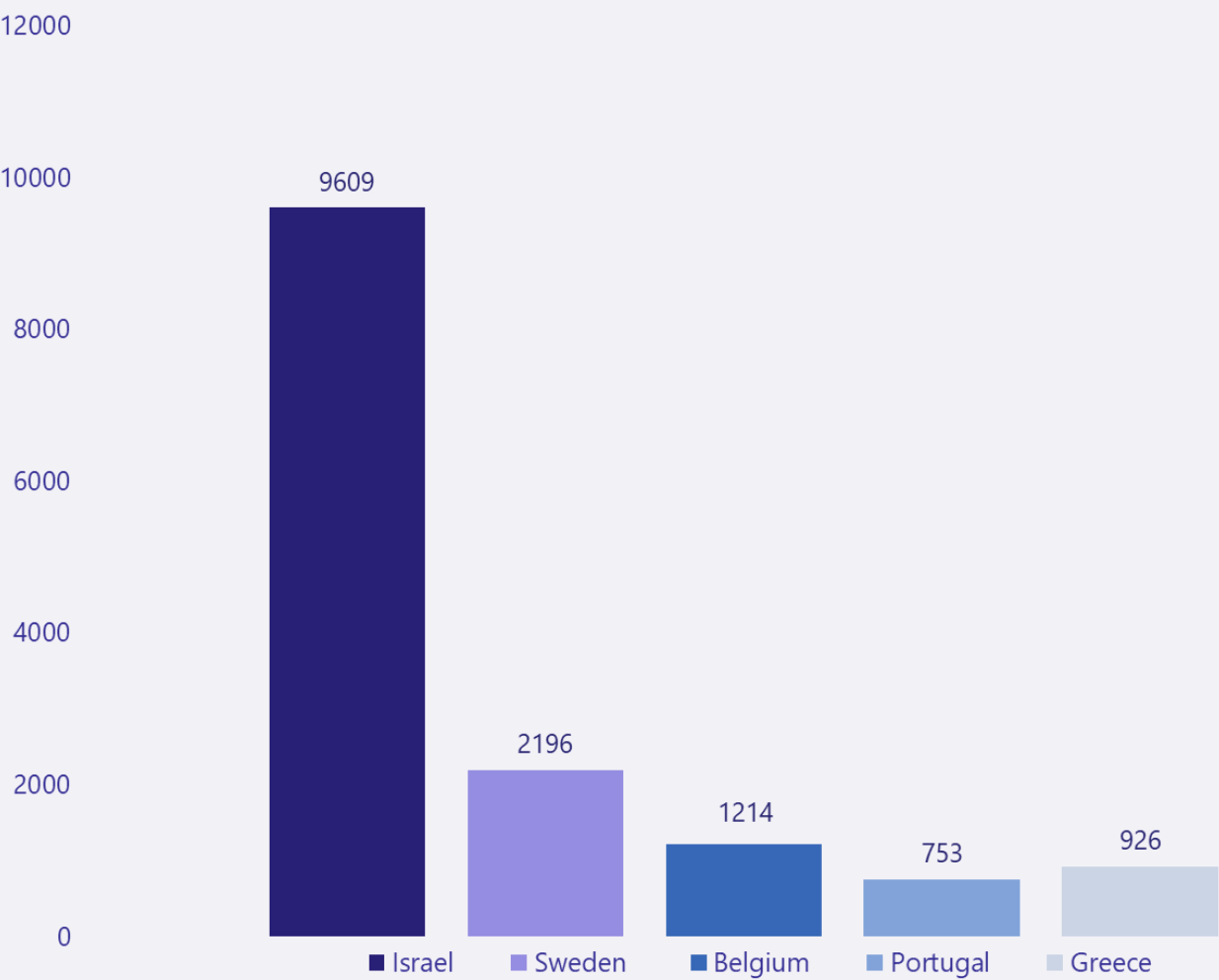
Patent fund



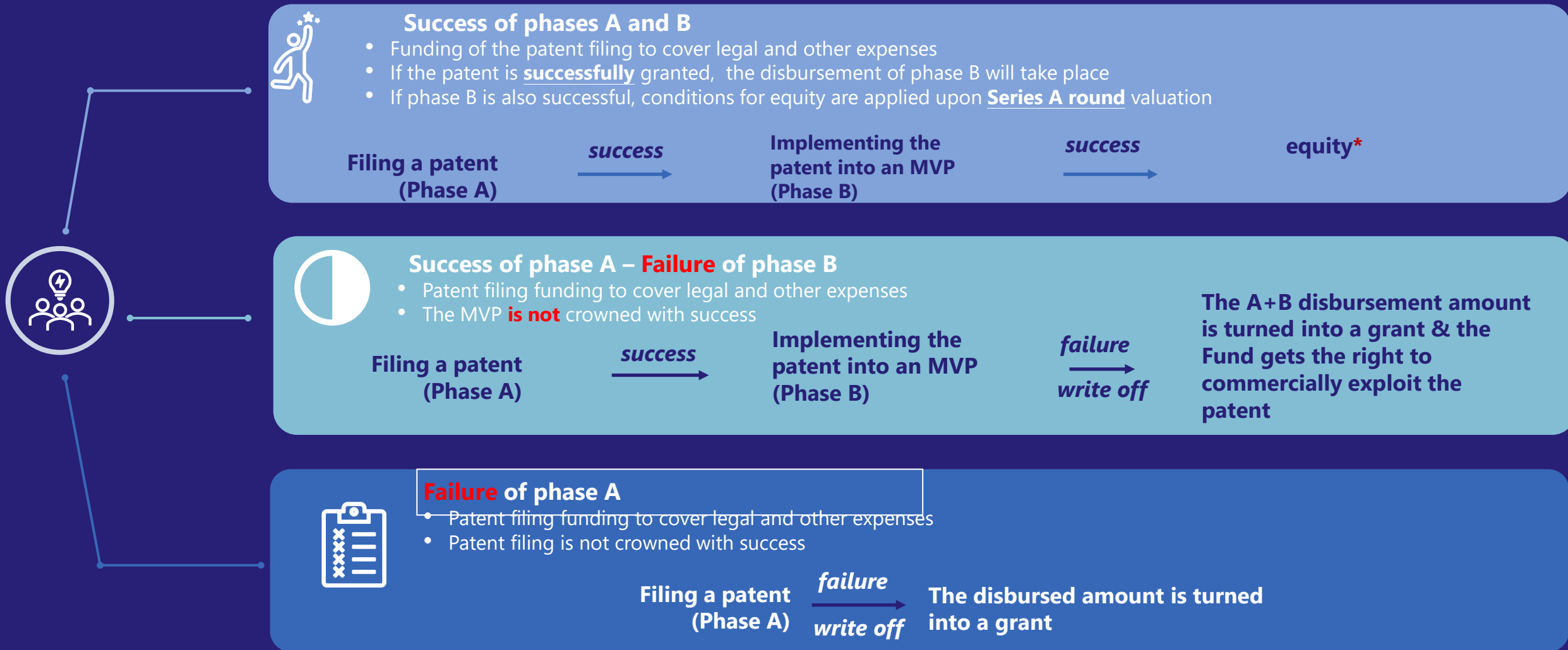
Market Gap

- In **2021**, approximately **926 patent applications** were filed by Greek residents.
- The **number of patent applications** from Greek residents is relatively **small in relation to the population of the country**.
- International applications is something that does not present significant growth within the last years.

Number of patents filed in 2021 -WIPO



Funding Scenarios



*equity: participation not as lead investor – 20-30% discount and with the right to follow-up in any subsequent investment round

Thank you

ΕΛΛΗΝΙΚΗ ΑΝΑΠΤΥΞΙΑΚΗ ΤΡΑΠΕΖΑ



HELLENIC DEVELOPMENT BANK