## PLENARY SESSION 1

## The Coming of Age of the Green Finance Sector





# Green Financing For innovative SMEs

Towards more sustainable future

Seok-Kyun Park Deputy Director | Global business Team



Innovation Growth platform for tech companies from Startup to Scaleup



## **About KOTEC**





### Established under the Special Law in 1989

(KOREA TECHNOLOGY CREDIT GUARANTEE FUND ACT)

- Contributions from Government & Financial Institutions

**Q** Vision

#### To be an Innovative growth platform

**⊗** By supporting tech companies from start-up to scale-up

**Core Values** 

Fairness, Innovation, Solidarity

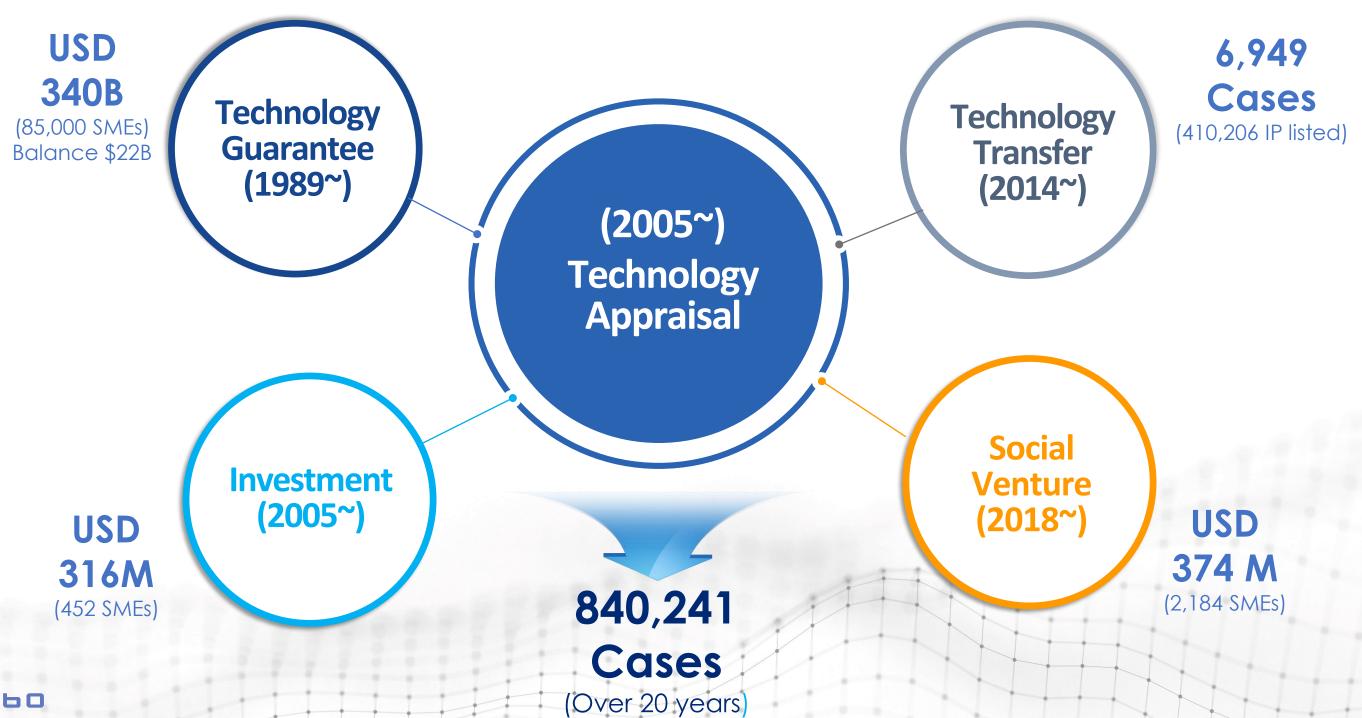


8 Regional HQ, 86 Branches, 1,485 Employees(294 PHDs, 951 experts)



## **Major Business**





1(160

## "2050 Net-Zero Declaration" in 2020









Carbon Neutrality by 2050

Green Transformation of SMEs

the Role of KOTEC



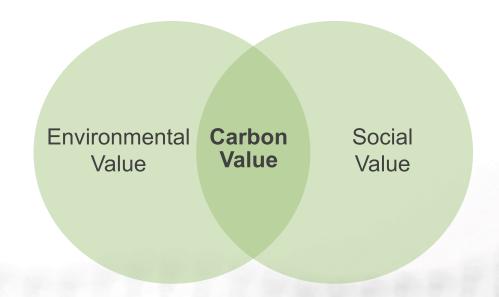
#### **Overview of Carbon Valuation Model**



#### **Carbon Value**

Monetizing the company's greenhouse gas reduction effects involves the following steps:

- 1. Estimating the reduction amount of greenhouse gas over a specified period (n)
- 2. Converting the estimated reduction amount into a monetary value in year (t)



#### **Carbon Valuation Model**

A model for assessing the carbon value of a company

Carbon value = 
$$\sum_{t=1}^{n}$$
 Reduction in greenhouse gas  $t$  X Emission permit price (1 + discount rate)  $t$ 

- n = period for calculating reduction in greenhouse gas,
- reduced amount of greenhouse gas = Greenhouse gas reduction in year t
- Emission permit price: The weighted average value of actual traded emission permit prices, based on the previous year's closing price
- Discount rate: quantifies potential risks associated with the evaluated technology's business, including technology risk, market risk, and business risk among others



### **Carbon Valuation Process**



## Step 2 Calculate Carbon Reduction Amount

Estimating carbon emission reductions expected from carbon reduction projects

## **Step 4**Determine Discount Rate

Considering cost of equity, equity weight, cost of debt, debt weight, and risk premium associated with technology commercialization



## Determine Calculation Period

Determine the period over which carbon emissions will be calculated

## **Step 3 Convert to Monetary Value**

3

Convert the carbon reduction amount to a monetary value based on the company's carbon reduction plan

## **Step 5**Calculate Carbon Value

Calculating carbon value by aggregating present values with discount rate applied



## **Our Green Guarantee Programs**



## Carbon Value Assessment

#### **Carbon Valuation Guarantee**

We support companies

that promote carbon neutrality and green growth through our carbon valuation model, evaluating greenhouse gas reduction and other factors in the transition to a carbon-neutral society.

500 billion KRW in 2023 (USD 385 million)

### Renewable Energy Guarantee

We boost competitiveness in the renewable energy sector and drive the activation of renewable energy projects, facilitating the transition to a carbon-neutral society.

157 billion KRW in 2023 (USD 121 million)



## **How SMEs benefit**



#### Advantages when SMEs applying KOTEC's green guarantee program



 Provides Additional guarantee by adding to the existing guarantee limit



- Fixed rate of 0.5% for Generation Companies
- Discount 0.2% to 0.4% for others



 Increased the guarantee ratio for loans from 85% up to 100%



## **Pre-Risk Management**





#### Set a pre-determined risk rate

- assign the risk limit amount
- handle guarantees within risk limits
- around 3% of the new guarantee amount



#### Al-based risk assessment models

- as supplementary reference tools
- additional indicators
- predicting default risks



#### **Fraud Risk Prevention**

- retrieve black-list information(KCB)
- ghost corporations, loss of nationality by CEO, bankruptcy discharge, concurrent loan status, and other relevant details.
- Assess deceptive, fraud or false guarantee applications



## **Post-Risk Management**



#### **Creditworthiness Monitoring**

Continuously monitor guarantee companies to identify potential insolvency risks and perform appropriate post-management tasks.

#### **Early Warning System**

Periodically calculate early warning grades(S1 to S4) and perform task processing tailored to each grade's characteristics.

#### **Focused Post-management**

Implement on-site investigations,
management improvement support or
exercise pre-default rights for
companies with weak business stability.

**S1** (good business stability)

**S2** (Limited risks and stable business)

\$3 (weak business stability or potential insolvency risks)

**S4** (Unstable companies or insolvency risks)

No action required

On-site investigations, Monitor and assess creditworthiness

Exercise pre-default rights upon confirmation of insolvency



## Thank you!

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## 'Appendix 1' Carbon Valuation Guarantee



## A model for assessing the carbon value of a company

#### Carbon Valuation Guarantee

Based on the application of
Climate Technology Rating
System (CTRS) and Carbon
Valuation Model (KCVM), it
calculates the technology project
evaluation grade and carbon
value amount. These
assessments are utilized for
preferential green financing.

Total
Guarantee Amount

## Climate Technology Rating System (CTRS)

A model that evaluates technology projects based on their economic value (such as revenue growth and job creation) as an evaluation grade, considering their potential for greenhouse gas reduction and adaptation to climate change.

General
Guarantee Amount

## KOTEC Carbon Valuation Model (KCVM)

A model used to measure and monetarily evaluate the greenhouse gas reduction effects of carbon-related business or projects. The model evaluates the environmental value of technology projects to provide guarantee support.

Additional Guarantee Limit





## 'Appendix 2' Eligibility Criteria





External Reduction Companies

Innovative businesses that produce and sell technologies, products, components, or materials that can induce greenhouse gas reduction effects.



Self-Reduction Companies

Companies that carry out their own greenhouse gas reduction projects, such as installing or replacing facilities, switching fuels, or introducing transportation vehicles.



Renewable Energy Generation Companies

Companies that install renewable energy facilities for business or personal use and supply, sell, or utilize energy (electricity, heat).



## Renewable Energy Industry Companies

Companies that
manufacture products
related to renewable energy
or commercialize related
technologies.





## Mongolia's Sustainable Finance Journey: from ESG to Transition

## Nomindari Enkhtur



#### CEO

Mongolian Sustainable Finance Association and Billion Tree Fund Advisor to IFC – Sustainable Banking and Finance Network



### Our Journey



2021 2013 2015 2018 2030

#### PHASE 1: COMMITMENT

- Voluntary commitment by **banking sector**
- Mongolian Sustainable Finance (MSF) **Principles** and Guidelines
- Awareness raising

#### PHASE 2: **IMPLEMENTATION**

- Operationalization of MSF principles
- Set of key frameworks and tools focused on **ESG** risk management
- Extensive capacity building
- Monitoring and reporting

#### PHASE 3: **EXPANSION**

- Green taxonomy
- Establishment of **MSFA** and Mongolia Green **Finance Corporation**
- Voluntary commitments by **non-bank Fls**
- Sustainable finance integration into capital markets

#### PHASE 4: **SCALE UP**

- National Sustainable Finance Roadmap
- **Policy frameworks** to promote sustainable finance
- Integration into **public finance** frameworks

#### PHASE 5: LEAD

- Increase green loans up to 10% and 5% in banks and **MFIs**
- Sustainable finance to become mainstream in all parts of the financial system and Mongolia to be recognized as a global **leader** on sustainable finance































































### Our Family



Established in 2017 36 members (as of July 2023)

Commercial banks (11)

Development bank (1)

Large NBFIs (12)

Mortgage Corporation (1)

Insurance companies (1)

Asset manager (1)

Business entities (3)

Research & training

institutions (2)











































































## Our Approach (Sustainable finance ecosystem)



#### 1.1 Overarching frameworks

- Mongolian sustainable finance principles by MBA & MSFA (2015 & 2023)
- National Sustainable Finance Roadmap by FSC (2018 & 2022)



#### 1.2 ESG risk management

- ESG risk guidelines by MBA (2015)
- ESG risk management directive by BoM and FRC (2022 & 2023)

1.ENABLING FRAMEWORKS
(VOLUNTARY &
REGULATORY)

## 1.4 Climate risk guideline by BoM (2023-2024)



- Green and SDG Taxonomy by FSC (2018 & 2023)
- Green bond framework by FRC (2021)
- Gender finance framework (2022)



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- ESG reporting guideline (2022)
- TCFD disclosure guideline (2023)



## Our Approach (Sustainable finance ecosystem ctd.)







#### 3. Supporting infrastructure

- 3.1 Assessment & research:
  - baseline studies, market assessments
- 3.2 Tools & guidelines policy template, due diligence tools:
  - o policy template, due diligence tools
- 3.3 Policy incentives/supervisory actions :
  - o Award, green swap, interest rate subsidy
- 3.4 Capacity & awareness:
  - o Elearning platform, in-person trainings
- 3.5 Product development & pilots
  - o EE housing, cashmere, agriculture etc.
- 3.6 Monitoring, reporting & verification:
  - o Annual assessment



#### 4. Financial products

- 4.1 Green and social loans
- 4.2 Green bonds
- 4.3 Green impacts funds and insurance



#### 5. Financial intermediaries

- 5.1 FIs
- 5.2 Mongolia Green Finance Corporation
- 5.3 Billion Tree Fund



## Our Priority Sectors





Energy-efficiency in buildings



Resource efficiency in businesses



Textile sector value-chain



Sustainable agriculture



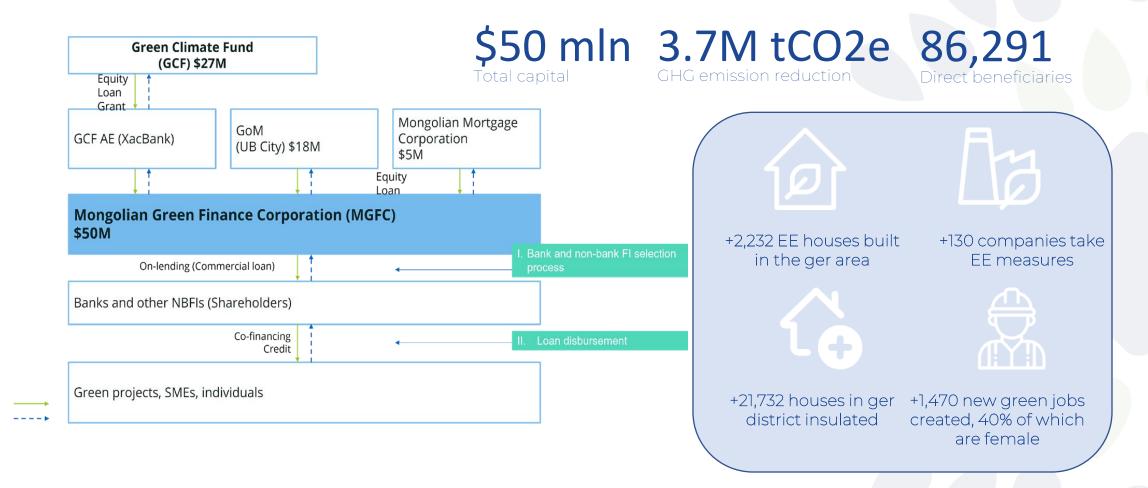
Sustainable forestry and landscape management





## Mongolia Green Finance Corporation





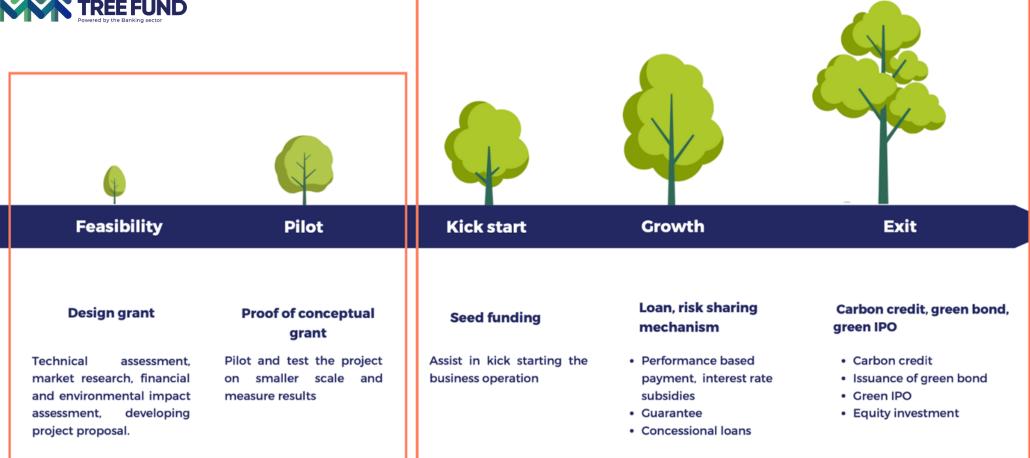


Investment Reporting, payback

## Mongolia Billion Tree Fund







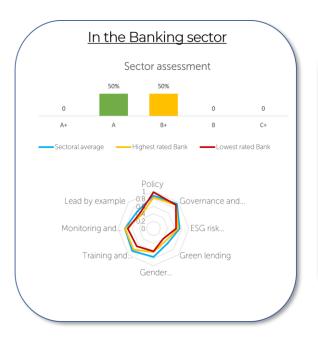
**IMPLENTATION BY THE FUND** 

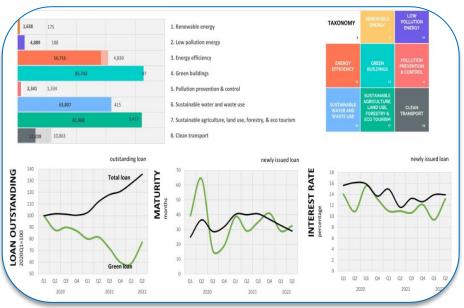
IMPLEMENTATION IN COORDINATION WTIH MGFC, LOCAL FINANCIAL ORGANIZATION. INTERNATIONAL FINANCING ORGANIZATIONS



## Our Monitoring and Reporting Framework









1. Member performance assessment and scoring by MSFA

2. Green loan dashboard by BoM and FRC

3. Global benchmarking and assessment (SBFN Annual Progress Report)

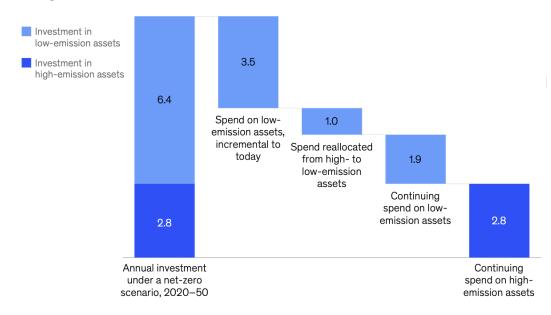


## Our Priority Areas Ahead (transition)

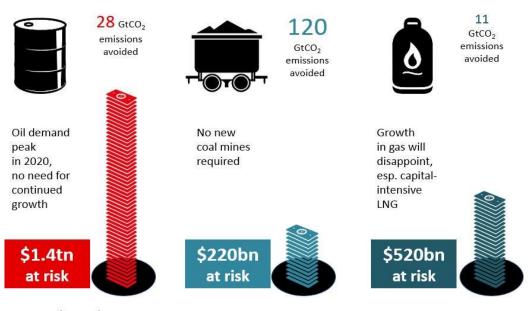


### Exhibit 1. Solving the net-zero equation would require an approximate \$9.2 trillion annual investment in energy and land-use systems.

Average annual investment under the NGFS¹ Net Zero 2050 scenario, 2020-50, \$ trillions



#### The \$2 trillion stranded assets danger zone: How fossil fuel firms risk destroying investor returns



Source: Carbon Tracker Danger Zone report, Nov 2015



• More money is needed, immediately.

Source: McKinsey 2023

• 1/3 of investment still required for high-emission assets.



### Our Priority Areas Ahead (green inclusive finance)



Funding we currently have is not getting to users where it really matters including low income households and SMEs!

#### Barriers

- MSMEs and vulnerable households do not qualify for bank green loans and lack collateral
- Green loan MRV is costly and raises the overall transaction cost
- Banks lack capacity to issue green loans for specifically for MSMEs
- MSMEs lack capacity to qualify for green loans and embed ESG in operations

#### Solutions

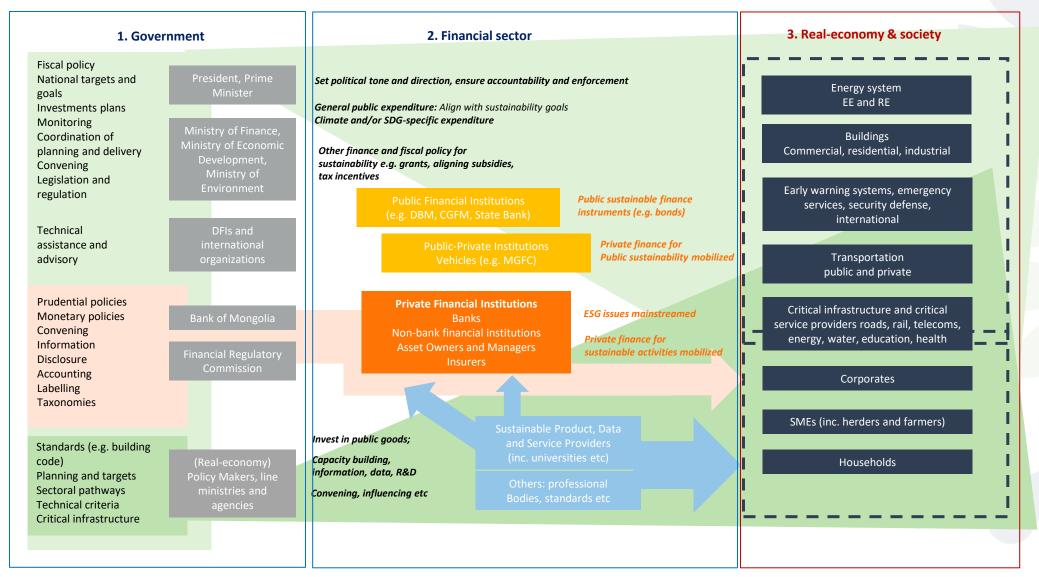
- Green finance policy measures (e.g. adjusted loan repayments, subsidies) and innovative instruments (e.g. credit guarantees, insurance)
- Tailored green/ESG guidelines/taxonomies, tools and digital MRV system to reduce green loan pre- and post-issuance costs
- Extend sustainable finance to microfinance institutions, and organize targeted trainings for both FIs and SMEs





## Our Priority Areas Ahead (systems transformation)













## Thank you for your attention and enjoy Mongolia!

www.toc.mn







## **Environmental Improvement through JFC**Credit Insurance & Loan Programs in Japan

The 35th ACSIC Plenary Session 1
August 8th, 2023

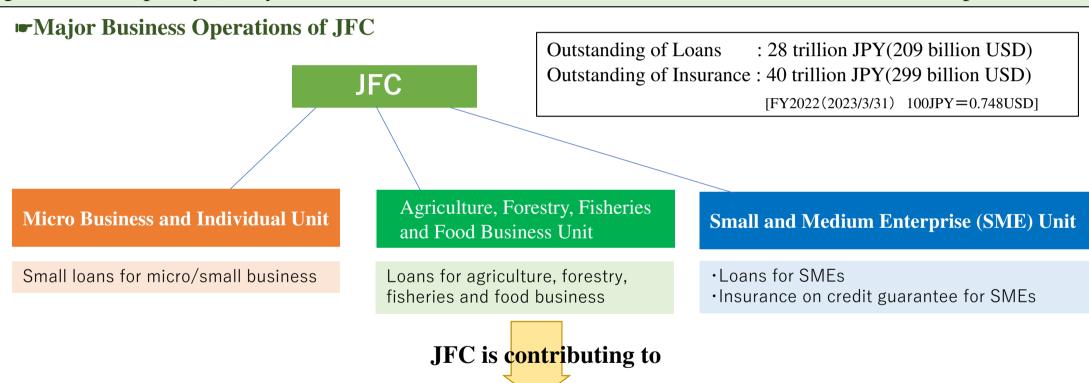


#### Agenda

- 1. Outline of JFC P3
- 2. Mechanism of the Japan's Credit Supplementation System P4~P6
- 3. Environmental Measures in Credit Insurance Programs P7~P8
- 4. Environmental Measures in Loan Programs P9~P12

#### 1. Outline of JFC

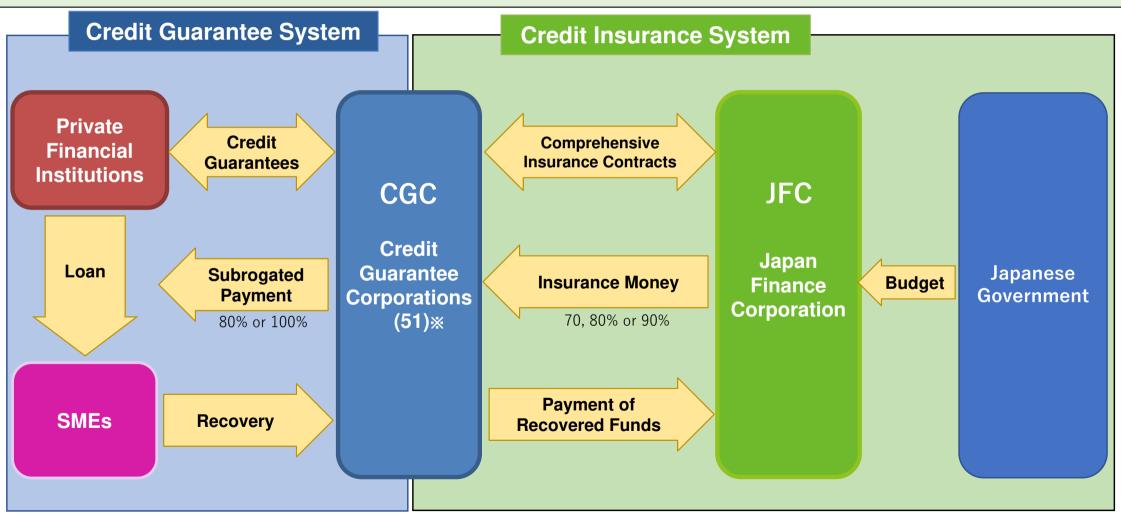
- ·JFC is a government financial institution intended to complement financing made by private financial institutions under governmental policy.
- •Providing loan and credit insurance in cooperation with private financial institutions in important fields of governmental policy (safety net, new business, business revitalization, succession and overseas expansion etc.)



- ·Business growth and globalization of SMEs and agriculture etc.
- Revitalization of local and regional economy
- Development of Japanese economy

## 2. Mechanism of the Japan's Credit Supplementation System

- · Japan's Credit Supplementation System is composed of Credit Guarantee by CGCs and Credit Insurance by JFC.
- •Both system, working together, facilitates loans from PFIs to SMEs.
- •Insurance money is covered by insurance premium and government budget.

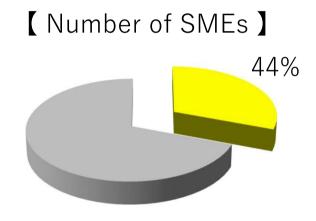


## 2. Mechanism of the Japan's Credit Supplementation System

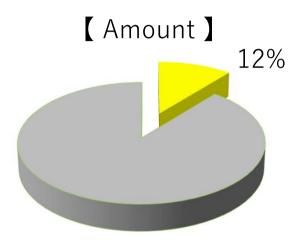
- •44% of SMEs utilize the Credit Supplementation System.
- •Outstanding loans to SMEs guaranteed by CGCs amount to 40 trillion JPY (299 billion USD), accounting for 12% of all loans to SMEs.

#### **Business Scale (Guarantee Utilization Ratio)**

[FY2022(2023/3/31) 100JPY=0.748USD]



Number of Guaranteed SMEs 1.58million JPY
Total Number of SMEs 3.57million JPY



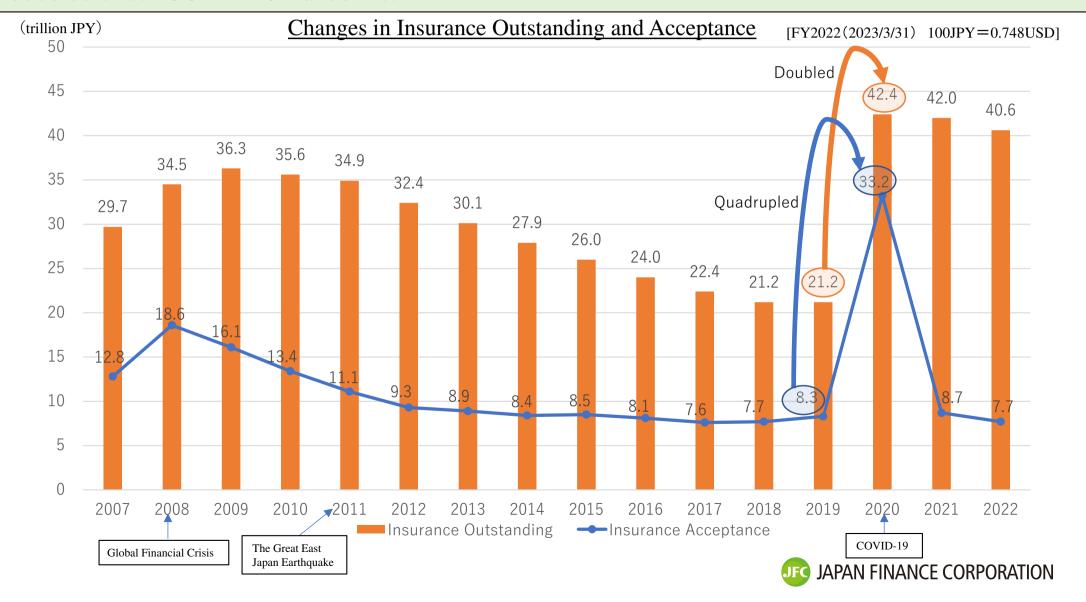
Outstanding Guaranteed Liabilities 40trillion JPY
Outstanding Loans to SMEs 339trillion JPY

#### [Average Insurance for FY 2022]

Average Insurance Acceptance per Business	19 million JPY
Average Insurance Period	5 Years 10Months
Average Number of Employees	7 Employees
Ratio of Businesses with 20 or less employees	75%

## 2. Mechanism of the Japan's Credit Supplementation System

- •Functioning as a Safety Net that facilitates fund-raising at the time of disasters and economic crisis.
- •Insurance acceptance in 2020 was four times the amount of the previous year and insurance outstanding doubled under COVID-19 Pandemic.



## 3. Environmental Measures in Credit Insurance Programs

#### **Major types of Insurance**

[FY2022(2023/3/31) 100JPY=0.748USD]

Type of Insurance	Ordinary	No-collateral	Special Small Sum
Eligible Funds	Business Funds	Business Funds (No collateral is required)	Business Funds (No collateral or guarantor is required)
Target	SMEs		SMEs 20 or less employees
Max. Amount	200 million JPY (1.49 million USD)	80 million JPY (0.59 million USD)	20 million JPY (0.14 million USD)
Premium Rate	0.25%~1.69%	0.25%~1.69%	0.40%
Coverage Ratio	70%	80%	80%
Component Ratio	18.9%	79.8%	0.1%

## 3. Environmental Measures in Credit Insurance Programs

JFC provides following two special types of insurance to support environmentally-friendly SMEs.

[FY2022(2023/3/31) 100JPY=0.748USD]

Type of Insurance	Environmental Pollution Preventive Facilities	Energy-saving Facilities	
Eligible Funds	Business Funds related to Environmental Pollution Prevention Installation costs of pollution preventive facilities Relocation costs for pollution prevention  Business Funds related to Energy Saving Installation costs of energy conservation facilities Installation costs of non-fossil energy facilities		
Target	SMEs		
Max. Amount	50 million JPY (0.37 million USD)	200 million JPY (1.49 million USD)	
Premium Rate	0.97%		
Coverage Ratio	80%		
Collateral	PFIs or CGCs can demand collateral		

### 4. Environmental Measures in Loan Programs

JFC provides "Loans for Environment and Energy Measures" to support environmentally-friendly SMEs.

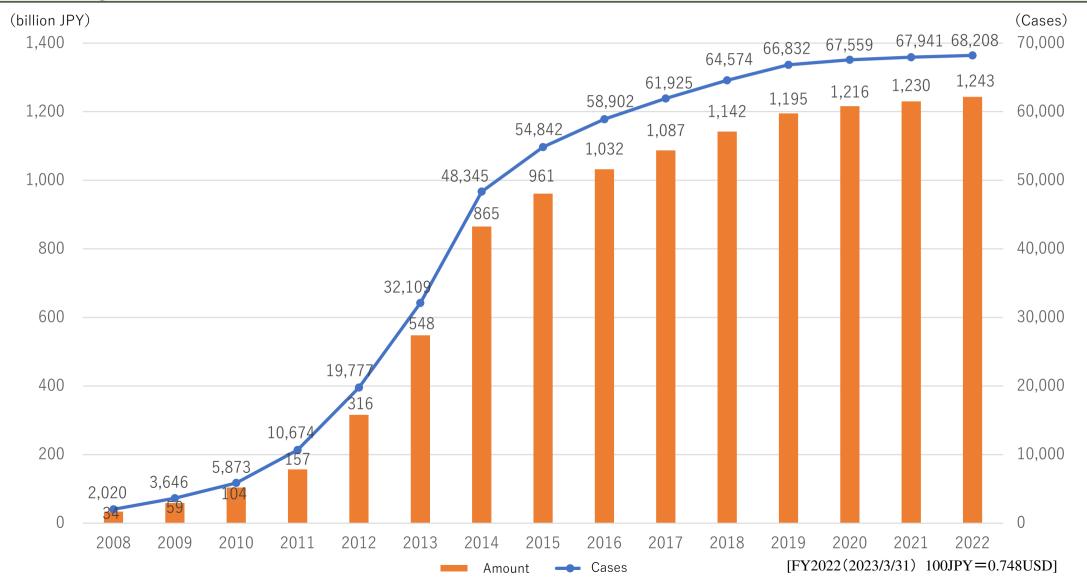
#### < Loans for Environment and Energy Measures >

[FY2022(2023/3/31) 100JPY = 0.748USD]

	87		
Objective	Support for SMEs that promote environmental measures Introducing non-fossil energy Promoting energy conservation Preventing pollution Effectively using renewable resources		
Eligible Borrowers	1 Those who install non-fossil energy facilities 2 Those who install energy-saving facilities 3 Those who acquire specific construction machinery or special motor vehicles 4 Those who calculate greenhouse gas emissions and engage in green transformation (Expansion from 2023)		
Max. Amount	720 million JPY (5.38 million USD)		
Interest Rate	Privileged Rate to 400 million JPY (2.99 million USD)		
Max. Loan Term	Facility Funds: 20 Years Operating Funds: 7 Years		

## 4. Environmental Measures in Loan Programs

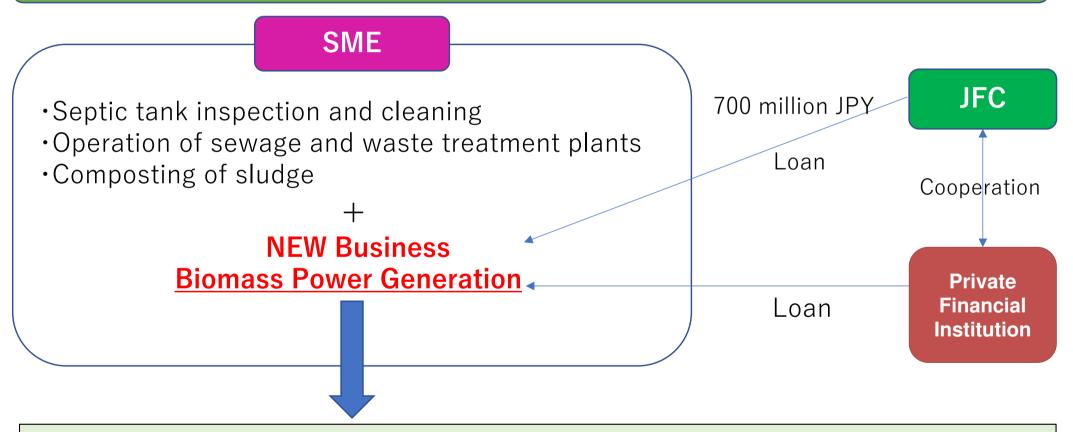
JFC have provided "Loans for Environment and Energy Measures" cumulatively total of 68,208 cases amounting to 1.2 trillion JPY (8.97 billion USD)



## 4. Environmental Measures in Loan Programs

Example of JFC's "Loans for Environment and Energy Measures" (loans to biomass power generation facilities)

Septic tank cleaning business company starts biomass power generation, utilizing JFC's loan



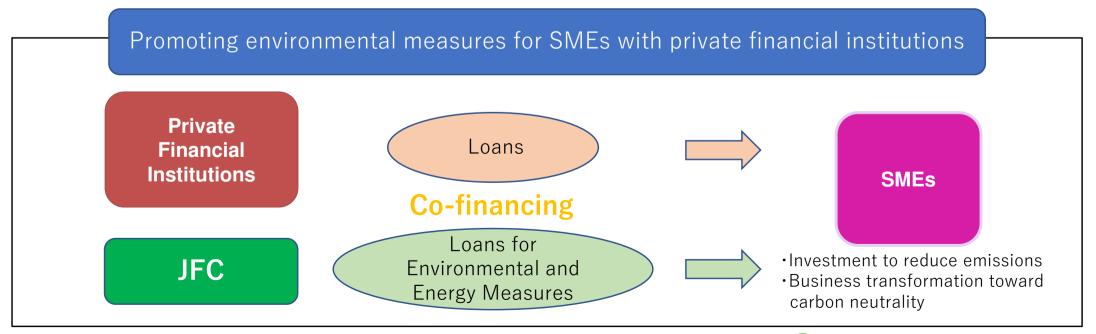
Handle the entire process from waste acceptance, fermentation and digested liquid treatment to biomass power generation and sale

## 4. Environmental Measures in Loan Programs

Adding to the target SMEs who calculate greenhouse gas emission and work on GX from 2023.

#### **Expansion of Loans for Environment and Energy Measures**

Eligible Borrowers (added)	Those who calculate greenhouse gas emissions and are engaged in green transformation
Max. Amount	720 million JPY (5.38 million USD)
Interest Rate	Privileged Rate to 400 million JPY (2.99 million USD)
Max. Loan Term	Facility Funds: 20 Years Operating Funds: 7 Years



# Thank you for your kind attention

https://www.jfc.go.jp/n/english/



# PANEL DISCUSSION A

Scaling new heights: CGS meets ESG









# KODIT's ESG:

Finance for Society,

KODIT Adding ESG Values

International Cooperation Center Director LEE Tae-hyun

The Best Partner Promoting the Challenges and Growth of Enterprise, "Beyond Guarantee"



## CG meets ESG?

CG meets ESG?



# OpenAI



- Certainly! CG, which stands for Credit Guarantee, can be aligned with ESG principles and considerations. Here's how CG can meet ESG: 1. Environmental (E): A Credit Guarantee
  - Institution can incorporate environmental considerations by encouraging and supporting companies that adopt environmentally sustainable practices. This can involve assessing the environmental impact of the companies seeking guarantees and promoting those that demonstrate responsible resource usage, pollution control, carbon footprint reduction, and compliance with environmental regulations. By supporting eco-friendly businesses, a CGI can contribute to environmental sustainability and help address climate change challenges.
- 2. Social (S): CGIs can address social aspects by considering the social impact of the companies they guarantee. This includes evaluating labor practices, employee welfare, diversity and inclusion initiatives, and community engagement efforts of the businesses seeking guarantees. A CGI can prioritize supporting companies that demonstrate fair employment practices, provide safe working conditions, foster diversity, support local communities, and contribute to social well-being.
- 3. Governance (G): Governance is vital for the long-term success and stability of any organization. A Credit Guarantee Institution can emphasize good governance practices in the companies it supports. This involves assessing their governance structures, transparency, risk management frameworks, and ethical conduct. By promoting companies with strong corporate governance practices, a CGI can contribute to sustainable business growth, mitigate risks, and

enhance investor confidence.

By integrating ESG considerations into their decision-making processes, CGIs can effectively balance financial viability with sustainable and responsible practices. This alignment allows CGIs to support companies that prioritize environmental sustainability, social responsibility, and sound governance, thereby fostering a more sustainable and inclusive economy. Furthermore, CGIs that embrace ESG principles may attract socially responsible investors, enhance their reputation, and contribute to the overall well-being of society.



What is the role of a credit guarantee institution in ESG?

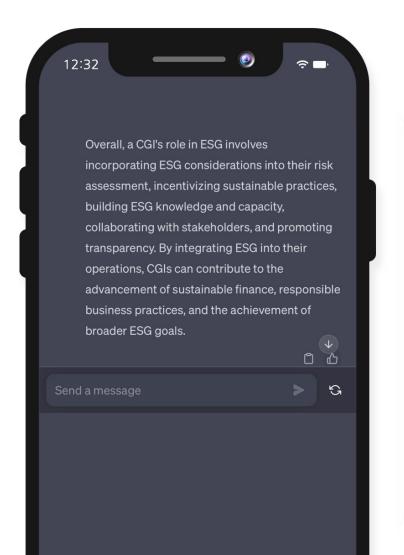




## Role of a Credit Guarantee Institution in ESG?



# OpenAI



## Answer

CGI's role in ESG involves

- 1) incorporating ESG into their risk assessment,
- 2) incentivizing sustainable practices,
- 3) building ESG knowledge and capacity,
- 4) collaborating with stakeholders, and
- 5) promoting transparency.

By integrating ESG into their operations, CGIs can contribute to the advancement of sustainable finance, responsible business practices, and the achievement of broader ESG goals.



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Highlights of KODIT ESG

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CHAPTER

01

**KODIT** Overview

## **KODIT** at a Glance





Exchange rate: USD 1=1264.5 KRW (Dec 2022)



- Establishment: 1976
- Status: Non-profit Special Legal Entity



- Capital Fund: USD 8.3 Billion
- Outstanding Guarantee: USD 65.9 Billion
- Number of Guaranteed Companies: 590,972

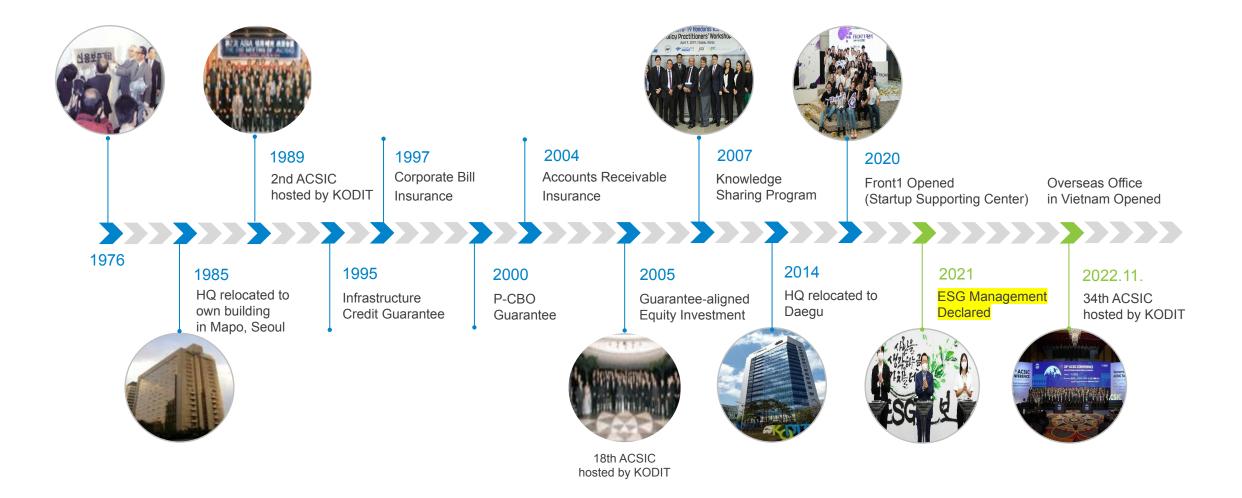


- Number of Employees: 2,685
- Business Network: 1 HQ, 9 Regional HQs, 109 Branches

(\*10 startup branches)

# History of KODIT





## **New Vision**

## **Beyond Guarantee**



## **☑** Beyond Guarantee

Beyond Guarantee, contains KODIT's will to leap forward as a comprehensive solution provider for corporate support.





## **Business Areas**



#### **Credit Guarantee**

Enhances SME Financing by providing guarantees for bank loans or business liabilities

#### Consulting

Provides consulting services to SMEs to enhance their competitiveness and productivity

#### Guarantee-aligned Equity Investment

Direct investments combined with guarantee enabling SMEs to secure funds through direct funding



Enables companies to raise funds from the direct financial market by helping issue and sell their corporate bonds

#### Credit Insurance

Pays insurance money to sellers in case they fail to get repaid from buyers due to buyer's insolvency or default

#### Infrastructure Guarantee

Facilitates raising investment funds from the private sector for construction of infrastructure



(\$)

## **Organizational Chart**





The Board of Policy

**Chief Audit Executive** 

Auditing & Examination Office

Chairperson & CEO

The Board of Directors

**Deputy President** 

Secretary Office

**Future Strategy Office** 

**ESG Promotion Center** 

Risk Management Office

Public Relations Office

International Cooperation Center

# Management Planning Division

- Planning & Coordination Dept.
- Performance Management Dept.

## Credit Business Division

•Credit Guarantee Dept.

ESG Finance Center

- •4.0 Business Start-up Dept.
- Capital Market Dept.
- •Financial Service Platform Dept.
- Big Data Dept.

## Strategic Business Division

- Credit Insurance Dept.
- Corporate Restructuring Dept.
- Infrastructure Guarantee Dept.

## Management Support Division

- •Human Resources Dept.
- Operation Support Dept.
- Customer Support Dept.

9 Regional Business Headquarters (8 ESG Guarantee teams)

**CHAPTER** 

02

**ESG** Vision of **KODIT** 

# Climate Change in the World





## What does ESG mean for SMEs?





#### **Environmental**

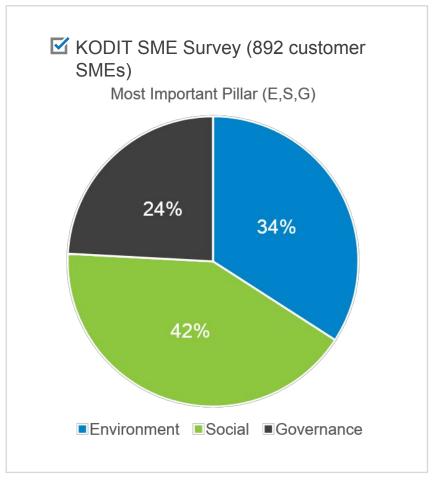
- Clean Technology
- · Climate Change / Carbon emission
- · Eco-friendly Building
- Environmental Pollution and **Emission of Pollutants**
- Natural Resource / Agriculture etc.

#### Social

- Employment Equity / Diversification of Employment
- · Human Right
- Labor
- Terror / Oppression

#### Governance

- · Board of Directors
- Compensation to Executives
- · Political Sponsorship
- Other Governance



(FY 2022)

## Credit Guarantee for Sustainable Growth



#### Add Greenness to Finance

- Green Finance
- Environmental Management
- Eco-friendly Activities

### Warmth to the Guarantee

- Mutual Growth with SMEs
- Local Community Development
- Safety and Data Protection
- Human Rights Management
- Job Creation

## Add Transparency to Management

- Operation of the Board of Directors
- Support for Transparent Management of SMEs
- Risk Management
- Ethical Management

#### **Job Creation** Effect of CGS

(Study Report on the benefits of CGS, FY2022)

- USD 1 million of new CG creates 8.6 of new jobs
  - In 2022, KODIT's new guarantee supply was USD 9.7 billion
  - As a result, KODIT created 83,420 new jobs in 2022

## Vision of KODIT





#### Mission

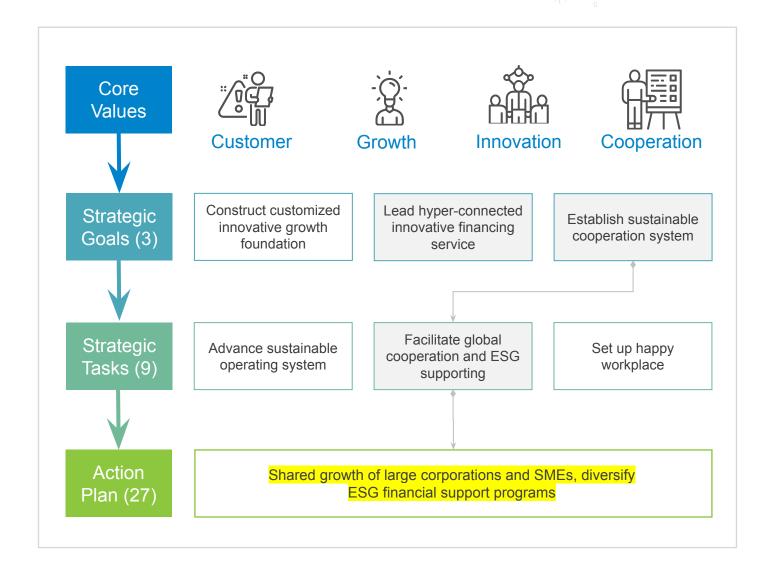
- Contribution to the Driving Force of Enterprises and
- the Balanced Development of National Economy



#### Vision

 The Best Partner Promoting the Challenges and Growth of Enterprises

"Beyond Guarantee"



## **ESG Vision of KODIT**

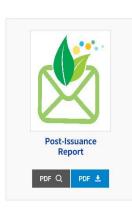




Proclamation of ESG Management (August 4, 2021)







ESG Vision

Strategic Goals (3)

Strategic Tasks (9) + Action Plans (27) Finance for Society, KODIT Adding ESG Values

Secure leadership in public institutions' ESG Management

Demonstrate KODIT's achievements in ESG sectors

Expand the policy role in carbon-neutrality

Fulfill the social responsibility

Secure internal control and management transparency Diversify ESG support system

Secure leadership in supporting ESG financing

Diversify support for ecofriendly companies

Strengthen support for leading industries that create value

Strengthen the data-based ESG services

Improve infrastructure for ESG support

Making the leap toward the hub of public-private partnership for ESG

Manage ESG-based portfolios

Establish ESG support system for SMEs

Strengthen foundation of ESG data cooperation in private sector





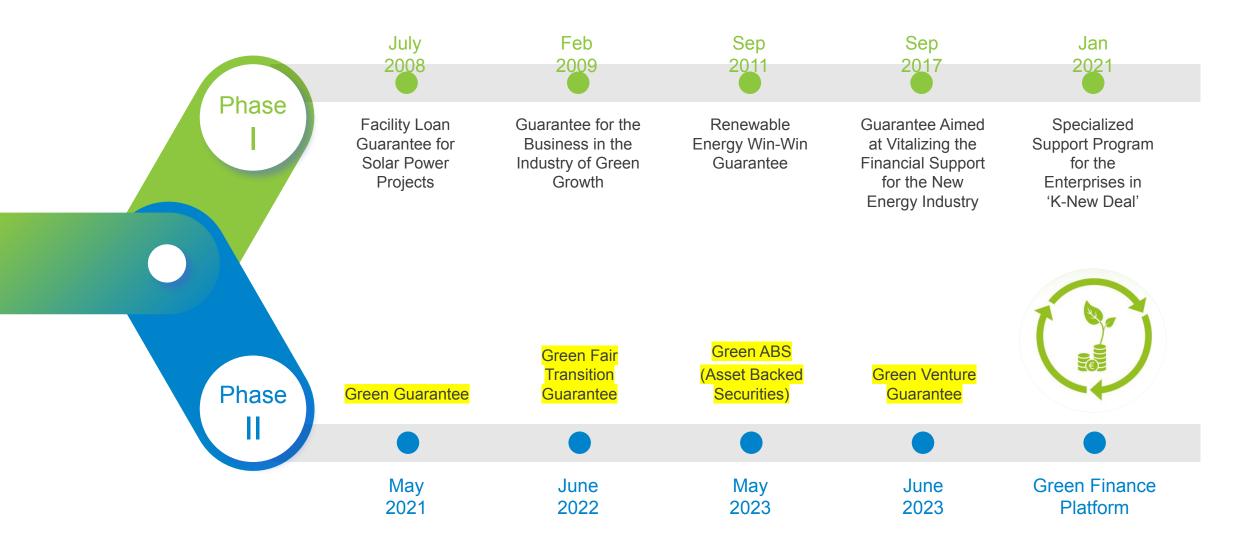
**CHAPTER** 

03

KODIT's **ESG** Finance

# **Green Finance History**





## **Products for Bank Loans**



### ☑ A. Green Guarantee

To foster a sound industrial ecosystem for renewable energy, KODIT provides specialized guarantees for enterprises which generate renewable energy or produce related products or possess technology in renewable energy

Guarantee	Power Generation	A company that installs facilities that generate renewable energy for power sales or self-use (Facility investment)						
Targets	Industrial Sector	A company that manufactures facilities or items related to renewable energy or possesses related technologies (Facility investment and working capital)						
Eligibility	•Enterprises should have agreement between KO	recommendation from <mark>Korea Energy Agency (KEA)</mark> based on the DIT and KEA						
Details	•(Advantages) Guarantee	USD 7.9 Mil (KRW 10 Bil) / Middle-standing Companies USD 15.8 Mil (KRW 20 Bil) e fee rate (discount 0.2%p or apply 0.5%) and coverage ratio (95~100%) rantee fee support by 4 commercial banks in agreement with KODIT						
Budget		cases) / <b>(2022)</b> USD 134 Mil (95 cases) / <b>(Half-year 2023)</b> USD 57 Mil (54 cases) y of Trade, Industry, and Energy						

## **Products for Bank Loans**



## ☑ B. Green Fair Transition Guarantee

To enhance SMEs' capacity on carbon-neutral response, KODIT provides preferential support for the following companies; e.g. build facilities that reduce greenhouse gas, manufacture low carbon products, strengthen R&D, expand production, etc.

Guarantee	
Targets	

Enterprises converting to low carbon	A company which build low-carbon facilities, improve manufacturing process, and promote energy efficiency
Enterprises with innovation in low carbon technology	A company which manufactures eco-friendly products or possesses advanced technology to produce such product
Enterprises planning low carbon projects	A company which introduces a facility for renewable energy generation or an eco-friendly transportation

#### Eligibility

•A company which meets the criteria of facility with GHG reduction, low carbon products & technologies, and GHG reduction effect of production process

#### Details

- •(Guarantee Limit) SMEs USD 7.9 Mil (KRW 10 Bil) / Middle-standing Companies USD 15.8 Mil (KRW 20 Bil)
- •(Advantages) Guarantee fee rate (discount 0.2%p or apply 0.5%) and coverage ratio (95~100%)
- \* Additional 0.5%p Guarantee fee support by 7 commercial banks in agreement with KODIT

#### Budget

- •(2022) USD 429 Mil (706 cases) / (Half-year 2023) USD 214 Mil (394 cases)
- \* Capital Fund : Ministry of Economy and Finance

## **Products for Bank Loans**



## ☑ C. Green Venture Guarantee

To support the climate tech industry by helping start-ups to smoothly finance greenhouse gas reduction technologies and climate adaptation projects (Part of "Funding Support for Innovative Ventures and Start-ups" and Plans to Strengthen Competitiveness" by FSC and MSS)

Guarante	е
Targets	

Climate Tech Growth Guarantee	Venture certified enterprises and start-ups that produce products or technologies in the field of Climate Tech
Climate Tech R&D Guarantee	Venture certified enterprises and start-ups that are pursuing R&D on innovative technologies in Climate Tech

#### Eligibility

•Enterprises should be green venture certified and produce products or possess technologies in the field of Climate Tech

#### Details

- •(Guarantee Limit) Climate Tech Growth USD 237K (KRW 0.3 Bil) / R&D Guarantee USD 79K (KRW 0.1 Bil)
- •(Advantages) Guarantee fee rate (maximum discount 0.4%p) and coverage ratio (90~100%)

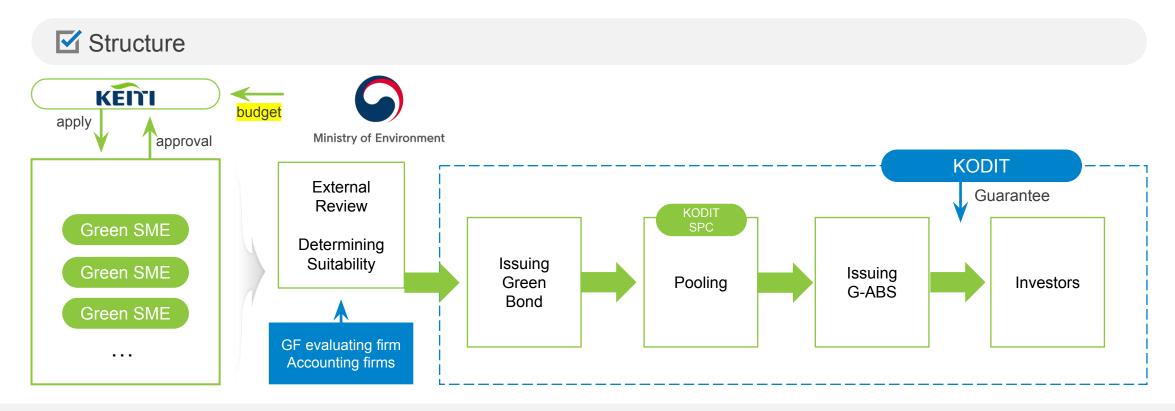
**Guarantee Goal** 

- •USD 79 Mil (KRW 100 Bil)
- \* Special Guarantee using Capital Fund of KODIT

## Green ABS



Green ABS (Asset Backed Securities) are issued by pooling the corporate bonds of enterprises which fall under the category of K-Taxonomy. \* KODIT signed a "business agreement for the issuance of Green ABS with the KEITI (Korea Environmental Industry & Technology Institute)"

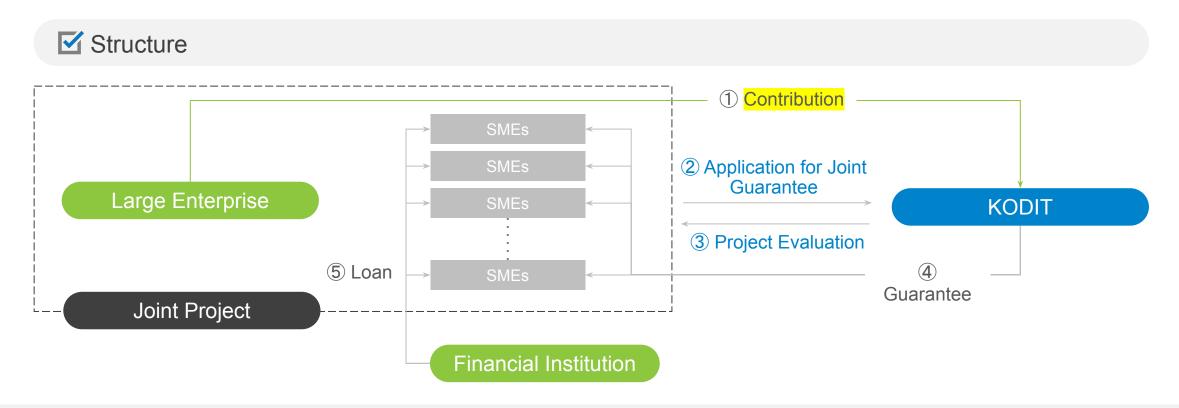


- Green ABS of SMEs was issued for the first time in Korea (USD 5.9 Mil, May 2023)
- Interest rate reduction of 4.2%p by support from the Government

## Joint Project Guarantee



To support SMEs participating in Future Innovative Joint projects (Innovative tech-based business such as future green mobility, eco-ship, etc.) with large companies. It has social value because it encourages win-win outcomes and the mutual growth of both large companies and SMEs



- Project support period up to 10 years, Guarantee limit USD 79 Mil (KRW 100 Bil) per project
- Additional 0.8%p discounts on guarantee fee by agreements with 3 financial institutions

# Joint Project Guarantee





# Hyundai Motors – KODIT Joint Project

- USD 9.9 Mil Special Contribution
- USD 119 Mil New Guarantee Supply
  - Maximum 5 years
  - Coverage Ratio 100%
  - Fixed Guarantee Fee 0.8%







Subscribe Q



The hottest electric cars in the US market aren't coming from Tesla factories. All eyes are on Hyundai's Ioniq 5 and the Kia EV6.

## **Mathematical**Benefits

For Large Enterprises (Conglomerate)

Contributions from large companies



Carry out projects that SME could not normally proceed due to lack of funds

Live Now

Green

Electric Vehicles



Create an effect of expanding business based on Large – SME cooperation

## **ESG Evaluation System**



☑ KODIT's ESG Evaluation Criteria – consists of 3 pillars, 12 themes, 32 factors



#### Calculation Process of ESG Evaluation Rating

Pillar	Theme	Score		Pillar	Theme	Score	Pillar	Theme	Score		ESG	K-ESG1 K-ESG2	
	Environmental Management				Social Management	60 (30)			Ethical Management			Overall Score	K-ESG3
	Eco-friendly System		+	S	Human Resources		4				= '		K-ESG4
Ε	Climate Change	80 (50)					60 (30)	G	Control Mechanism	70 (20)		72	K-ESG5
	Efficieny of Resource Using				Social Relationship	-			Shareholders and Affiliates		-		K-ESG6
	Pollution and Waste				Safety and Security								K-ESG7

Rating



**CHAPTER** 

04

# Highlights of KODIT ESG

Highlight A: Partnership with Stakeholders | Highlight B: Evaluation Model to avoid ESG Washing | Highlight C: Global Standard "Follower to Leader"

(Case) Super Bin: Trash is MONEY

# A. Partnership with Stakeholders



Presidential Commendation for Carbon-Neutral Energy Development (Dec 2021)



Ministerial Commendation for Sustainable Growth ESG Sector (Dec 2022)



#### Government



Ministry of Trade, Industry and Energy



Ministry of Economy and Finance



Ministry of Environment





## Large Enterprises









#### Banks













DGB Daegu Bank OGB

## B. Evaluation Model to avoid ESG Washing







## **1** ESG Management Capacity

Assessment - Group4) are given by combining systemic (quantitative) evaluation and analyst's (qualitative) evaluation of variables

## **2 ESG Evaluation**

System (K-ESG1 ~ K-ESG7) evaluation based on numerical data, KODIT's system elaborately measures the company's accurate ESG Level

#### 3 Climate Change Response Technology

Evaluation (TR1 ~ TR10) after the evaluation of the capability for commercialization and competitiveness in climate technology

#### **4** GHG Emissions Measurement

G reduction is automatically calculated by entering the quantified data of facility capacity or energy consumption of the facility (GHG Emissions = Activity Data x GHG Emissions Factor)

## C. Global Standard "Follower to Leader"

















# (Case Study) Super Bin





" Trash is MONEY"





## **Recycled Resources** by SuperBin

As of 2023.06



197,006,323 +







The Number of Cans

75,105,032 +

Accumulated Amount of Cashed Rewards(KRW)

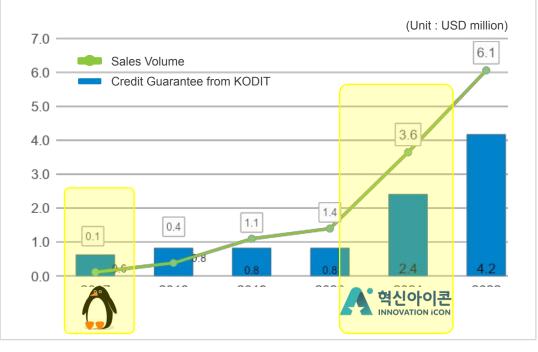
0.34 billions +





#### Innovative ICON Start-up of KODIT

- Make the recycling and reusing waste more efficient and profitable / Al & Robotics Technology / Circular Economy
- Firm Value : 316 million USD
- Raised over 32.4 million USD in total

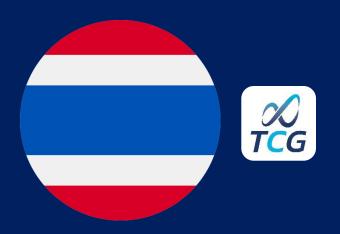


# Thank you

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#### 35<sup>th</sup> ACSIC Conference



## Scaling new heights: TCG meets ESG



By Mr. Kittipong Buranasiri

August 7-11, 2023 Ulaanbaatar, Mongolia

#### Thai Credit Guarantee Corporation (TCG)



A state-owned Financial institution governed by the Ministry of Finance

**STATUS**: Specialized Financial Institution (SFI)

**ESTABLISHMENT**: 1991

CAPITAL FUND: \$6,702 million (\$197 million)

• BRANCH:

1 Head office, 11 branches

FINANCIAL ADVISORY CENTER for SMEs :

TCG F.A. Center

OUTSTANDING GUARANTEE :

#648,878 million (As of Jul 2023) (\$19,085 million)

**NUMBER OF GUARANTEED CUSTOMERS:** 

785,888 SMEs (As of Jul 2023)

**NUMBER OF EMPLOYEES:** 

**417** (As of Jul 2023)

## Role and duty of TCG are to provide assistances to SMEs

TCG's role is to be a mechanism in driving the economy by providing assistances to SMEs in acquiring fund and business consultation to operate their businesses to survive and thrive.



TCG is an organization that provides a government support to SMEs. TCG issues a collateral value for SMEs to back up a borrowing from banks.



TCG is able to subsidized guarantee fee to SMEs by the Cabinet approval. All subsidized cost helps reducing financial cost to SMEs.



As a credit guarantor, TCG encourages banks to provide more loans. Value of a TCG's guarantee uses to cover the borrowed SMEs' debt.



TCG upgrades its consulting services to SMEs by acting as a Debt Doctor or Financial Advisor at TCG F.A. Center.



Remark: Exchange Rate as of Jul 2023 (THB34: USD1)

#### Thai SME Landscape



Thai SMEs 3.2 Mil. Enterprises



The Contribution of the SME's economic value to the national economy



· 12% of Export Value



Medium 0.04 Mil. Small

**Micro** 

2.7 Mil (86%)

#### **Thailand's Government Policy For SMEs**

- 20-year national strategy
- The 13th National Economic and Social Development Plan
- State Enterprise Development Plan
- 5-year operating policy of Specialized Financial Institutions (SFIs)

'Bank of Thailand' has issued a 'NEW Financial Landscape' for the digital economy and sustainable growth

#### **Digital**

Openness for new players to equally compete along with developing sufficient infrastructure and database

#### **Sustainable**

Encourage the economy to adapt to caring for the environment without causing widespread negative impacts

#### Resilient

Promote regulated innovation to keep up with new risks

#### What TCG does .....

To develop products for vulnerable and **ESG-concerned SMEs** 

To provide advices and empowers SMEs by Training and Consulting

#### Micro/Startup

- Startup & Innovation
- Micro Entrepreneurs 1-4
- PGS10 SMEs Startup

#### **Green Business**

PGS10 SMEs Smart Green

#### 'Green Business

is an industries try to transform with New **Business Model** especially....







#### **Digital Transformation**

 Paperless for approving guarantees via online system

#### **Hybrid Working**

- Reduce Carbon by using Online Platform
- hybrid working routine

#### **Upgrading the TCG F.A. Center**

providing knowledge and assistance in running business and being an expertise mentor for **SMEs** 

#### **Debt Resolving for Sustainability**

"TCG Ready to Help" for debtors

**TCG is trying to help SMEs in increasing proportion** (SME Penetration Rate is about 25%)



#### TCG meets ESG



#### Product \

For 'Small SMEs or Retail'

Micro Entrepreneurs 1-4 - \$58,500Mil. (\$1,750 Mil.) PGS9 SMEs fulfill Micro SMEs - \$8,400Mil. (\$250 Mil.) PGS10 SMEs Small Biz - \$4,000Mil. (\$120 Mil.)(Existing) Total Guarantee Amount

\$120 Mil.)(Existing) **\$87,099 Mil.**Accumulated Amounts as of Jul, 2023 (\$2,562 Mil.)

54% in Manufacturing, Consumer goods, and Service businesses

#### Service

F.A Center to acquire fund, educate business knowledge and enhance the potential of SMEs

"TCG Ready to Help", which is a proactive operation to increase the efficiency of helping debtors by dividing into 3 measures that are suitable for each debtor

#### **CSR in & after Process**

TCG connect opportunities for prisoners who would like to training program after acquitted









TCG



Governance





**Product** For 'Green SMEs' launches in Feb,2023

PGS10 Smart Green (\$15 Mil.)(Existing)

In Metal Manufacturing, Consumer goods, Service, Food & Beverage and EV Car businesses

Total Guarantee Amount **B73.87** Mil.

Accumulated Amounts as of Jul, 2023 (\$2.17 Mil.)

#### **CSR in & after Process**

- TCG Activities day for supporting SMEs by giving the plants etc.
- Paperless for documents adapt to digital platform
- **Under evaluation Eco-Efficiency** to be used for improvement





#### **CSR in & after Process**

#### TCG emphasizes on Governance via:

- gives importance to employees equally and fairly etc.
- Executives are a good 'Role Model' in line with TCG's Core Values
- Report to regulatory agencies including stakeholders frequently

#### Guarantee by pride awards;

- an Excellent Organization Development Award 2022 given by Prime Minister of Thailand
- 4 years continue NACC Integrity awards from 2019 to the present



#### 'Next Move' for Sustainability





NCB DED (1) (2)

Shopee Shopee

S LINE BK

(i) (ii) the (iii) (iii)

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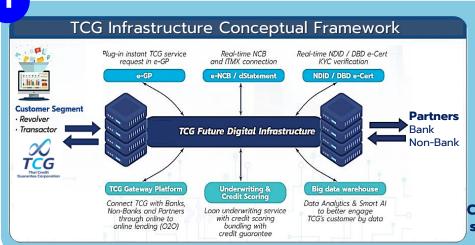




Continuing to compromise or restructure debt by 'TCG Ready to Help' and expand to help ESG entrepreneurs with special conditions.



CO





Rebranding to Digital Transformation

√ Paperless √ Hybrid Workplace



Product and Service
Connectivity and Building
strong relationships with
key stakeholders

## Appendix

#### SMEs' Financial Advisory Center (TCG FA Center)





- To be the center of financial advisory to resolve debts for SMEs entrepreneurs
- To recommend and select suitable credit products and financial institutions for SMEs who need to access to finance.
- To help the unemployed becoming freelancers or SMEs entrepreneurs
- · To enhance financial literacy and business knowledge for SMEs.
- Consulting service without any charge.





#### **Service Channels**



TCG F.A. Center



Group consultation



Individual consultation



Line application consultation (Video Call)



#### **Mission and Service**



#### 1. Financial advisory

By experts who are the former senior executives of financial institutions

- Applying for a loan/preparing for applying for a loan
- Debt restructuring/solving business issues
- Business development



#### 2. Information Center

- Bank loan products
- Government policy projects
- Information for SMEs business development



#### 3. Special training

- Finance course
- Debt restructuring course
- Startup and Business Development course

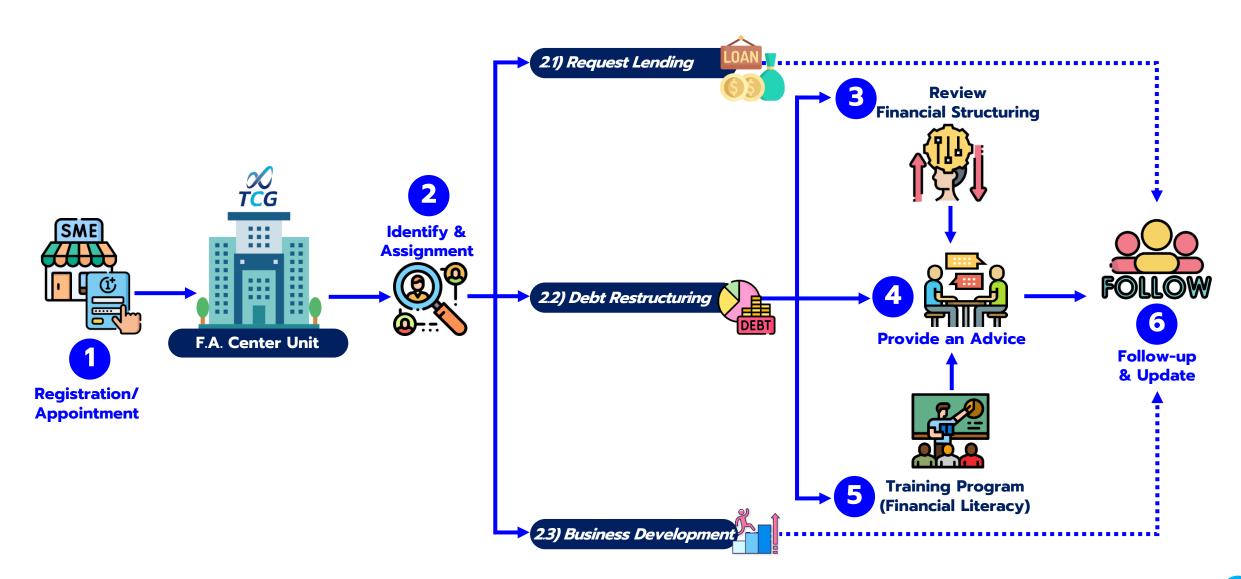


#### 4. Monitoring and tracking

- Business diagnostic
- · Follow up with financial institutions for both borrowing and debt restructuring

#### **F.A. Center Process Flow**







## **EXPERT INSIGHT DISCUSSION 1**

## **Green Capital Markets Development: Insights from Central Asia**







# MARKETS DEVELOPMENT: INSIGHTS FROM CENTRAL ASIA

9 August 2023

On behalf of:







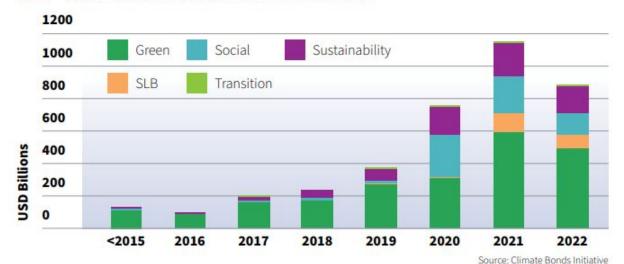


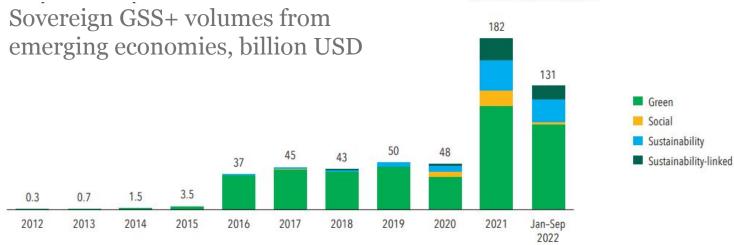
#### WHAT ARE GREEN BONDS?



## Green bonds have gone from a niche instrument to a substantial market

#### GSS+ volumes reached USD858.5bn in 2022





- Issuances of thematic bonds have accelerated sharply in recent years, including in emerging markets.
- Emerging market issuances still make up only a small fraction of the total market.
- Transition economies in Eastern Europe, the Caucasus and Central Asia (EECCA) began issuing green bonds in 2019.



## Emergence of green bonds in EECCA and Mongolia

2019 2020 2021 2022 2023 **Georgia Global Utilities** Ameriabank II **Khan Bank** Georgian Railways JSC **DTEK Renewables USD 500 mn** USD 8 mn; AMD USD 60 million **USD 250 mn EUR 325 mn** 3 bn 5 years, 8.5% 2 years, 7.75% 7 years, 4% 5 years ->refinance assets ->refinance debt, rail infra % n.d. ->RE projects 27 months ->RE + other 3.5% (USD); 9.5% (AMD) **Ameriabank I Ministry of Finance** Ukrenergo ->RE + other EUR 42 mn **EUR 325 mn UZS 2 tn / USD 555 mn** 5 years, 8.5% 3 years / 10 years (.... 5 years, 3.05% ->RE + other ->sust.-linked portion 14.5% / 3.7% -> "DFI bond" **Ministry of Finance DAMU Fund** USD 635 mn / USD 235 mn USD 0.5 mn **3/10 years** 3 years 3.9%/14% ->solar -> "SDG bond" **ADB** 

> USD 32 mn 2 years, 10.1%

->solar



#### WHY GREEN BONDS?

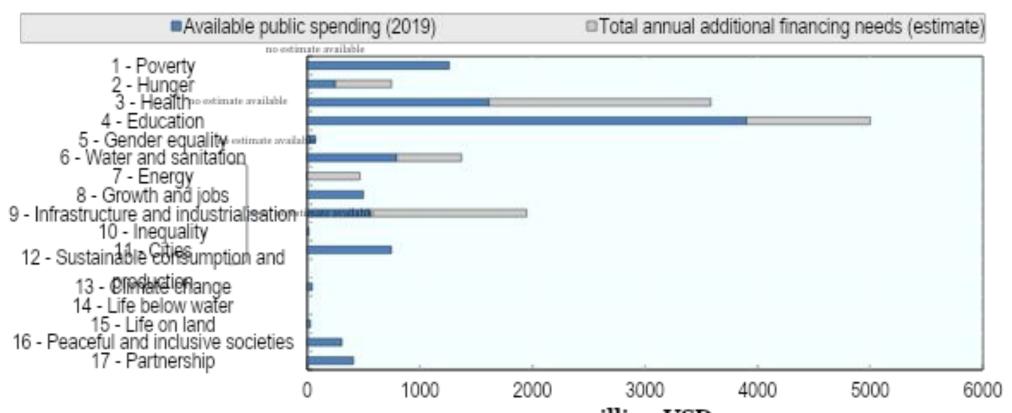


### A daunting investment gap across Asia

- The ADB estimates that the annual investment gap across Asia amounts to:
  - USD 47 billion (4.7% of GDP) in Indonesia
  - USD 92 billion (3.8% of GDP) across 8 other Southeast Asian economies
  - USD 112 billion (4.1% of GDP) in India
- The pandemic only widened the gap. Across the developing world, the annual SDG financing gap increased by 56% (from USD 2.5 trillion to USD 3.9 trillion) following COVID-19.



#### SDG financing gap: Case of Uzbekistan



Source: UNDP (2021), Development Finance Assessment of the Republic of Uzbekistan, <a href="https://www.undp.org/uzbekistan/publications/development-finance-assessment-republic-uzbekistan">https://www.undp.org/uzbekistan/publications/development-finance-assessment-republic-uzbekistan</a>



## Ambitious domestic targets: Case of Uzbekistan

Strategy Title	Main objectives	Current status		
Revised Nationally Determined Contribution (NDC) 1 by 2030	Climate change: 35% reduction in GHG emissions per unit of GDP compared to 2010 levels	Climate change: Off track: slight drop of GHG emissions per unit of GDP between 2010 (3.58 kt CO <sub>2</sub> e) and 2020 (3.07 kt CO <sub>2</sub> e)		
"New Uzbekistan" Development Strategy for 2022-2026   objectives by 2026	Renewable energy: 25% renewable energy sources in TPES  Energy efficiency: increase energy efficiency by 20%  Transport: electrify 60% of railways; incentivize EV production and uptake  Domestic capital market development: increase turnover on the stock market from USD 200 million to USD 7 billion  Investment: attract USD 120 billion in investments, of which USD 70 billion from foreign sources  Privatisation: increase private share of banking system's assets to 60%	Renewable energy: Off track: renewables accounted for 0.9% of TPES in 2022.  Transport: Approximately 35% of railways electrified by 2021.  Domestic capital market development: 310% increase in stock market activity between 2021 and 2022, up to UZS 4.7 trillion (approx. USD 442 million)		
Strategy for the Transition to a Green Economy 2019-2030 [all objectives by 2030; Strategy updated in 2022	2021 levels	Renewable energy: Off track: renewables accounted for 0.9% of TPES in 2022; installed photovoltaic capacity negligible in 2022		



## Public financing is insufficient; the private sector needs to be developed

- Public budgets are under strain. International development finance available now, but less and less in the future.
- In Central Asia, which historically relied on state-led economic models, diversification is a priority.
  - Compared to other lower-middle income countries, Uzbekistan's consolidated government spending was 7% points higher.
- Rapid per capita growth in the region, particularly Uzbekistan, means international development finance at concessional rates will become less accessible.

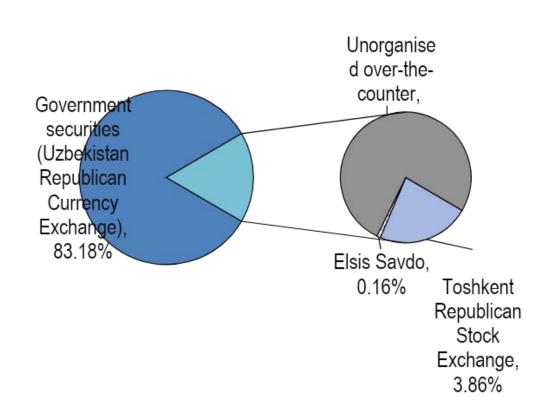


## GREEN BONDS IN UZBEKISTAN: CHALLENGES AND OPPORTUNITIES



#### Challenge: Immature financial system

- In Uzbekistan, like many other post-Soviet republics, SOEs and state-owned banks dominate the economy.
  - Just 5 state-owned banks manage
     61% of all assets in the banking sector.
- Uzbekistan's capital markets are shallow and underdeveloped.
- Market infrastructure is insufficient for a well-functioning market.
  - Uzbekistan's securities market is divided across two platforms.
  - Most corporate transactions occur via informal broker-dealer networks.





## Opportunity: Strong signals to experiment with bonds

Issuer	Issued value	Date of issuance	Maturity	Issuance yield	Current yield (Nov. 2022)	Current price, percent of issued value (Nov. 2022)	
I. Sovereign bonds							
Uzbekistan*	USD 500 million	20/02/2019	5 years	4.75%	9.63%	95.32%	
	USD 500 million		10 years	5.375%	8.72%	84.05%	
Uzbekistan* so-called "DFI bond"	USD 555 million	25/11/2020	10 years	3.7%	8.49%	72.43%	
	UZS 2 trillion		3 years	14.5%	18.78%	96.29%	
Uzbekistan* so-called "SDG bond"	USD 635 million	19/07/2021	10 years	3.9%	8.50%	71.55%	
	UZS 2.5 trillion		3 years	14.0%	17.99%	94.49%	
II. Corporate bonds (issued by banks)							
SanoatQurilishBank (SQB)	USD 300 million	12/2019	5 years	5.75%	12.32%	88.25%	
National Bank (NBU)	USD 300 million	10/2020	5 years	4.85%	9.91%	87.26%	
Ipoteka Bank	USD 300 million	11/2020	5 years	5.50%	11.57%	84.79%	
III. Corporate bonds (issu	ed by industrial						
Uzautomotors	USD 300 million	04/2021	5 years	4.85%	14.94%	73.24%	
Uzbekneftegaz	USD 700 million	06/2021	7 years	4.75%	10.84%	73.53%	



## Challenge: Capacity Opportunity: Peer learning

- Capacity constraints and a lack of qualified financial actors have hampered Uzbekistan's financial system's development.
- Given the novelty of debt instruments in Uzbekistan, peer learning from experienced financial actors is essential.
- Under SIPA, a peer-learning exercise between SQB (one of Uzbekistan's largest banks) and Ameriabank (an Armenian peer bank and regional leader in green bonds) was organised.





#### Other areas for exploration

#### Islamic finance (green sukuk)

- Considerable potential for Islamic financial instruments such as green sukuk in Uzbekistan.
   27% of citizens do not have a bank account for faith-related reasons.
- Islamic finance could provide an opportunity to expand the domestic capital market.
- However, there is no legal framework for Islamic finance in Uzbekistan.

#### Subnational sovereign bonds

- Subnational governments are well-suited to know local needs and interests. They account
  for a large and increasing share of expenditure, including on sustainability-related
  infrastructure.
- In more developed economies, subnational sovereign bonds account for a larger share of issuances than sovereign bonds.
- However, Uzbekistan's budget code stipulates that subnational governments must maintain a balanced budget and cannot issue debt.



#### Uzbekistan's next steps

- Ongoing privatisation process
- Development of a national green taxonomy
- Consolidation of securities market infrastructure and relevant legislation
- Seize opportunities related to national priorities
  - Large-scale renewable energy projects
  - Domestic EV production and adoption
  - Islamic finance



#### THANK YOU! МАШ ИХ БАЯРЛАЛАА!

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https://www.oecd.org/site/sipa/