

# PLENARY SESSION 2

## Funding for Impact





**SIPA**

**Sustainable Infrastructure  
Programme in Asia**

# THE ROLE OF SMES IN THE NET-ZERO TRANSITION

9 August 2023

On behalf of:



of the Federal Republic of Germany





# Agenda

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- 1) Why SMEs?
  - Potential for greening SMEs and barriers facing SMEs compared to larger firms
- 2) Good practices from the OECD and ASEAN
  - Financial tools
- 3) Further reading



# WHY SMES?



## SMEs: Highly impactful in aggregate

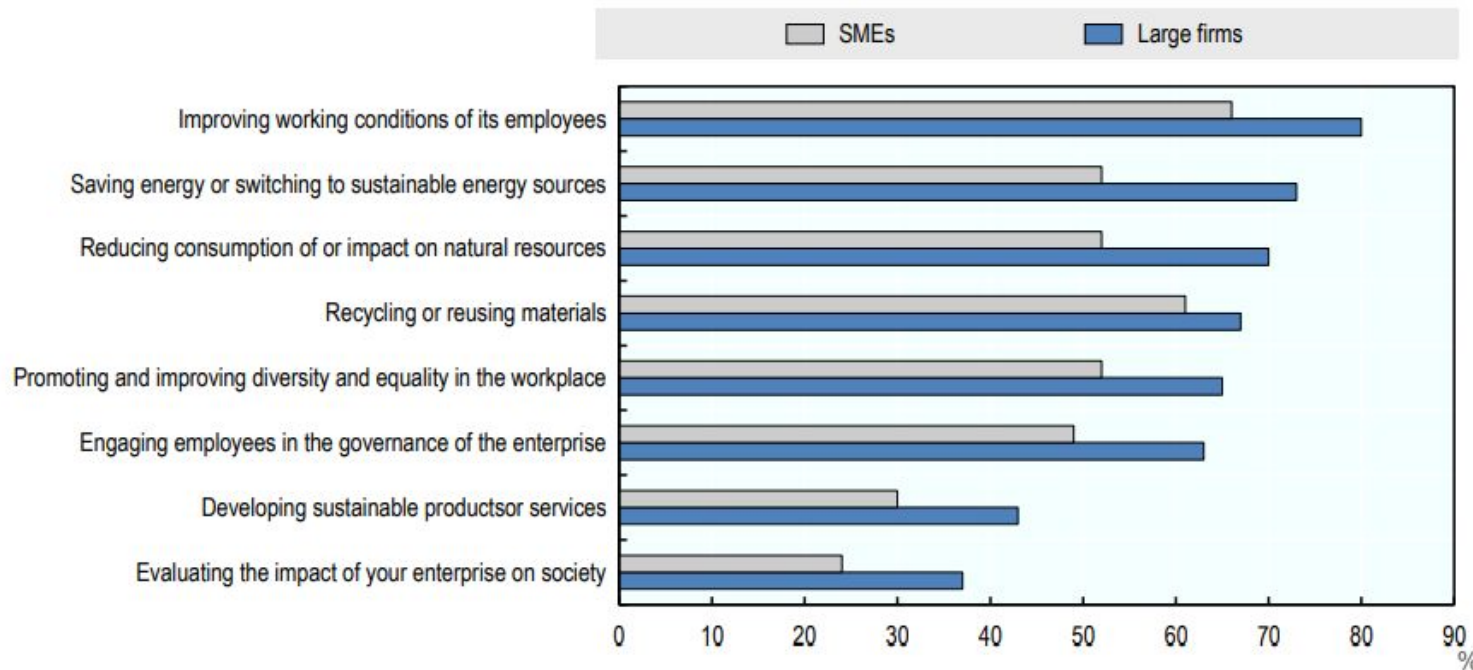
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- SMEs are economies' primary motors of growth and sources of employment. They account for:
  - **60% of employment** in OECD economies, and
  - **50-60% of value added** in OECD economies.
- Most efforts on climate change and other environmental concerns have focused on large firms, but SMEs will play a pivotal role in minimising environmental impacts.
- Data on SMEs' environmental impacts are lacking and not always comparable. According to existing studies, they may account for:
  - **64% of industrial pollution** and **60-70% of industrial waste** in Europe,
  - **50% of GHG emissions** worldwide, and
  - **13% of global final energy demand** worldwide.



# Sustainability efforts: large firms vs SMEs

In terms of environmental and social sustainability, which of the following actions, if any, is your enterprise actively taking? (Multiple responses possible)



- SMEs receive **less scrutiny than large firms** on environmental impacts.
- **Fewer engage in energy and resource saving activities** compared to larger firms.

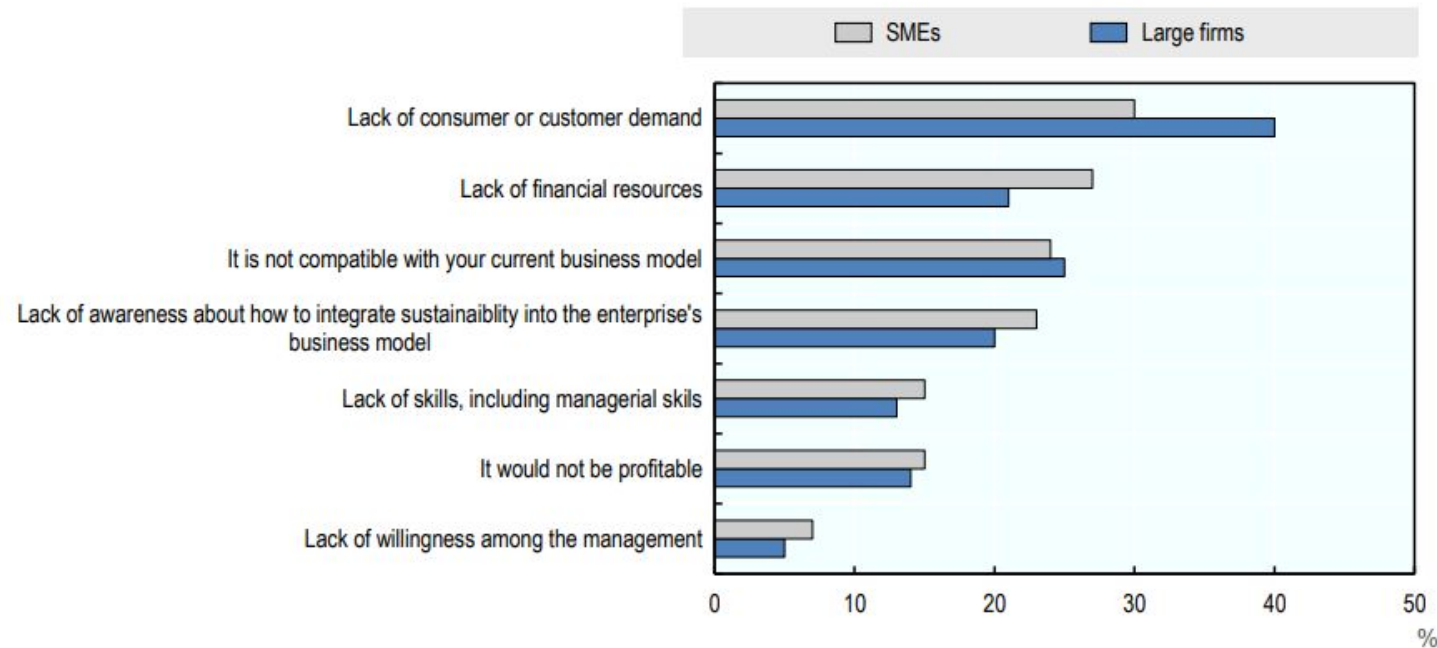
Note: Sample covers 12 615 firms in European Union Member States. The survey was conducted between February and May 2020.

Source: (European Commission, 2020<sup>[38]</sup>)



# Barriers to greening: larger firms vs SMEs

Which of the following, if any, are currently preventing your enterprise from becoming sustainable, i.e. combining long-term success and profitability with a positive impact on society and the environment? (Multiple responses possible)



Note: Sample covers 12 615 firms in European Union Member States. The survey was conducted between February and May 2020.  
Source: (European Commission, 2020<sup>[89]</sup>)

- **Lack of financial resources** is one of the main barriers to greening SMEs.
- SMEs find **interest rates and collateral requirements for bank loans prohibitive**, and they may **lack information** about other sources of finance.

# GOOD PRACTICES FROM OECD AND ASEAN COUNTRIES: FOCUS ON FINANCIAL TOOLS





## Access to finance: General principles

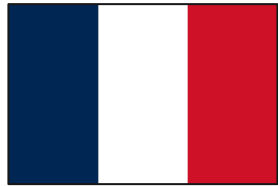
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- **SMEs face greater challenges** than larger firms with respect to access to finance.
- For SMEs, **loan terms** (interest rates, collateral) may be prohibitive. For banks, the comparatively **small volume of SME loans** may not seem worthwhile.
- The mismatch between the **tenor of loans** available to SMEs and the longer **payback period of green investments** makes them less appealing to SMEs.
- SMEs often **lack capacity** to make the business case for green investments, including in terms of applying for loans and satisfying ongoing reporting requirements.



## Low-interest loans and other support

- Public financial institutions may offer reduced interest loans for environmental investment by SMEs. Conditions may include planned measures beyond regulatory requirements, certification by the environmental authority and the use of best available techniques. IFI credit lines disbursed through local commercial banks can improve access to SMEs.



OSEO (France): favourable rates without collateral between EUR 30k – EUR 3mn for up to 7 years.



Resource Efficient Scotland: interest-free loans of GBP 1-100k, with support from the Scottish government



Centre of Forest Development Financing (Indonesia): soft loans with revenue sharing agreements and long payback periods (up to 16 years) at below-market interest rates



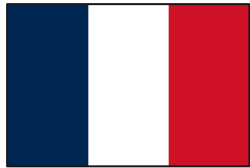
Credit Guarantee Corporation Malaysia: loan guarantees, expert support, credit rating services for low-carbon investments



# Grants and consultancy services

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- Public agency **grants** for the purchase of environmental technologies
- **Subsidised consultancy costs** for the identification of resource efficiency measures and their implementation
- **Direct subsidies** and **free technical assistance** to increase awareness and secure initial engagement.



ADEME (France): subsidies of up to 50% of environmental audit costs



Enterprise Ireland: grants for up to 50% of consultancy costs



KfW (Germany): special fund covers up to 80% of costs for professional advice leading to energy efficiency improvements



Energy Efficiency Fund (Singapore):

- Design workshops for new facilities and expansions (50% of costs)
- Energy efficiency assessments (50% of costs, up to SGD 200k)
- Grants conditional on adoption of energy efficient technologies



# Self-diagnostic tools for SME greening

- **Knowledge gaps** regarding environmental impact and potential benefits of greening are a barrier to seeking existing programmes. Several self-diagnostic tools have been developed to help SMEs.



## Green Industry Platform: I-GO Assistant

- assesses current status and provides tailored guidance based on activity, size and location



## EIB: Energy Efficiency Quick Estimator

- facilitates energy lending for SMEs



## SME Climate Hub

- gathers best-in-class tools related to measuring emissions, climate strategy development and more



## OECD: Sustainable Manufacturing Toolkit

- helps measure and improve environmental performance



## Further reading

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- Financial tools tailored to SMEs needs are essential. Other tools would also facilitate the greening of SMEs. **Regulatory and information tools** are other important pieces of the puzzle. More information can be found in the publications below:
  - OECD (2021), *Facilitating the green transition for ASEAN SMEs*, <https://www.oecd.org/southeast-asia/regional-programme/networks/OECD-Facilitating-the-green-transition-for-ASEAN-SMEs.pdf>.
  - OECD (2021), “No net zero without SMEs: Exploring the key issues for greening SMEs and green entrepreneurship”, *OECD SME and Entrepreneurship Papers*, No. 30, <https://doi.org/10.1787/bab63915-en>.
  - OECD (2018), *Environmental Policy Toolkit for SME Greening in EU Eastern Partnership Countries*, <https://doi.org/10.1787/9789264293199-en>.



THANK YOU! МАШ ИХ БАЯРЛАЛАА!

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



**MINISTRY OF FINANCE**

# **GREEN DEVELOPMENT POLICY OF MONGOLIA**

**L.Sonor**

**Director of Financial Market and Insurance Division,  
Financial Policy Department, Ministry of Finance**

**August 9, 2023**



committed to reduce greenhouse gas emissions by

22.7%

2030

2040

2050

2020

NEW RECOVERY POLICY



PUBLIC PRODUCTIVITY



GREEN DEVELOPMENT



BORDER PORTS DEVELOPMENT



ENERGY DEVELOPMENT



INDUSTRIAL DEVELOPMENT



URBAN, RURAL DEVELOPMENT

VISION 2050 LONG TERM DEVELOPMENT POLICY

Vision-2050's scope covers

80% of the SDG targets.

focuses especially on 3 SDGs:

SDG 2: Zero Hunger

SDG 7: Affordable and Clean Energy

SDG 15: Life on Land, given major pressures on its domestic ecosystems, including soil erosion and water runoff





## THE LAW ON VALUE ADDED TAX



### EXEMPTED FROM VAT:

“13.1.28.renewable energy research and production equipment, its accessories or spare parts”

## THE LAW ON CUSTOMS TARIFFS AND CUSTOMS DUTIES



### EXEMPTED FROM THE CUSTOMS DUTIES:

“38.1.18.Renewable energy research and production equipment, its accessories and spare parts”

## THE LAW ON EXEPMTION FROM CUSTOMS /2018.01.12/



“Article 1. In order to reduce air pollution and improve air quality in the capital, import air purifiers and energy-efficient heating devices shall be **EXEMPTED FROM CUSTOMS DUTIES**”

## THE LAW ON PERSONAL INCOME TAX



### TAX DISCOUNTS:

23.7.Where a taxpayer purchased, for own use, solar, wind, geothermal or other renewable energy equipment, coal derived semi-coke fuel, gas and liquid fuel extraction equipment, standard furnace, low pressure furnace/boiler, insulation material, electric or gas heater, discount shall be applied on taxes applicable to income, earned in the same year, equal to the payment slips of such purchase.

## THE LAW ON CORPORATE INCOME TAX



### TAX REDUCTION ON INCOMES:

“22.5.7.tax equal to 50 percent on the investment income earned from a free zone by a business that invested 500 thousand US Dollars or more for the construction of infrastructure like energy and heat sources, power networks, clean water supply, sewerage, road, railway, airport and communication networks in the free zone”



## Principles:

1

- The **protection** of natural environment, people and communities, and cultural heritage.

2

- The **promotion** of green economic growth, financial inclusion, ethical finance and corporate governance, and transparency and accountability.

3

- The **practice** of all these principles and reporting on a regular basis on the progress.

The roadmap proposes 12 activities across three pillars:

- environmental and social risk management,
- green financing flows
- an enabling environment

Approved in **2022**

The financial sector decided to significantly increase green loans by 2030:

**Banking sector**



**10%**

**Non-banking financial sector**



**5%**

at least 15 % of financial needs for the implementation of Mongolia's **Nationally Determined Contribution** with the source of banks and financial institutes



# MONGOLIAN GREEN TAXONOMY

Approved in **2019**

|                                 |  |                                |
|---------------------------------|--|--------------------------------|
|                                 | RENEWABLE ENERGY   | LOW POLLUTION ENERGY           |
| ENERGY EFFICIENCY               | GREEN BUILDINGS  | POLLUTION PREVENTION & CONTROL |
| SUSTAINABLE WATER AND WASTE USE | SUSTAINABLE AGRICULTURE LAND USE, FORESTRY & ECO TOURISM | CLEAN TRANSPORT                |

8

Categories

28

Sub-categories

58

Technologies

# SDG FINANCE TAXONOMY

Approved in **2023**

12

Sectors

57

Sub-sectors

225

Technologies

|   |   |   |
|---|---|---|
| ENERGY SUPPLY, INFRASTRUCTURE                   | HEALTH                                      | ACCESSIBLE INFRASTRUCTURE   |
| ENERGY EFFICIENCY                               | EDUCATION, CULTURE                          | POLLUTION PREVENTION & CONTROL  |
| SUSTAINABLE WATER AND WASTE USE                 | SUSTAINABLE AGRICULTURE                     | LOW-CARBON TRANSPORT  |
| INFORMATION, COMMUNICATION & TECHNOLOGIES (ICT) | SUSTAINABLE URBAN PLANNING AND CONSTRUCTION | SUSTAINABLE LAND USE, BIODIVERSITY SUSTAINABLE LAND USE, BIODIVERSITY |



Objective: To increase the coherence of national development policy planning and financing, and to direct public and private financial resources to SDG investments.





Finance or re-finance public expenditures to achieve one or more following objectives



Access to health



Access to Education



Renewable energy & Energy efficiency



Sustainable cities, housing and infrastructure



Pollution prevention and control



Sustainable water and waste use



Sustainable agriculture & food security



Sustainable land use, forestry, biodiversity conservation & eco-tourism



Clean & sustainable transport

Second Party Opinion

Aligned

S&P Global Ratings

Mongolia will finance under the SDG Bond Framework public expenditures intended to contribute to the achievement of one or more SDGs





**THANK YOU  
FOR YOUR ATTENTION**



# Diversification of Green Finance Products

—Green Finance Products Developed Through  
Cooperation Between CGC s and Local Governments,  
Utilizing Energy Resources in Various Regions—



**35th ACSIC CONFERENCE  
August 2023**



Japan Federation of  
Credit Guarantee Corporations

**Japan Federation of Credit  
Guarantee Corporations**



# Contents

1. Overview of Credit Guarantee Corporations
2. Structure of Credit Supplementation System
3. Cooperation with Local Governments and Specialized Organizations in the Credit Guarantee System
4. Role of Credit Guarantee System and Business Performance
5. Changes in Installed Capacity of Renewable Energy
6. Guarantee Program for Renewable Energy
7. Features of the Guarantee Program for Renewable Energy
8. Green Finance Initiative Case Study, Part 1 (Tokushima Prefecture)
9. Green Finance Initiative Case Study, Part 2 (Relationship with Mongolia)
10. Green Finance Initiative Case Study, Part 3 (Business Overview)
11. Green Finance Initiative Case Study, Part 4 (Financial Support for Businesses)
12. Green Finance Initiative Case Study, Part 5 (Introductory Video)



# 1

## Overview of Credit Guarantee Corporations

### CGCs

**Number of Executive Officers and Staffs: 6,018**

**Number of offices: 183**

**Main business: Credit guarantee services and management support**

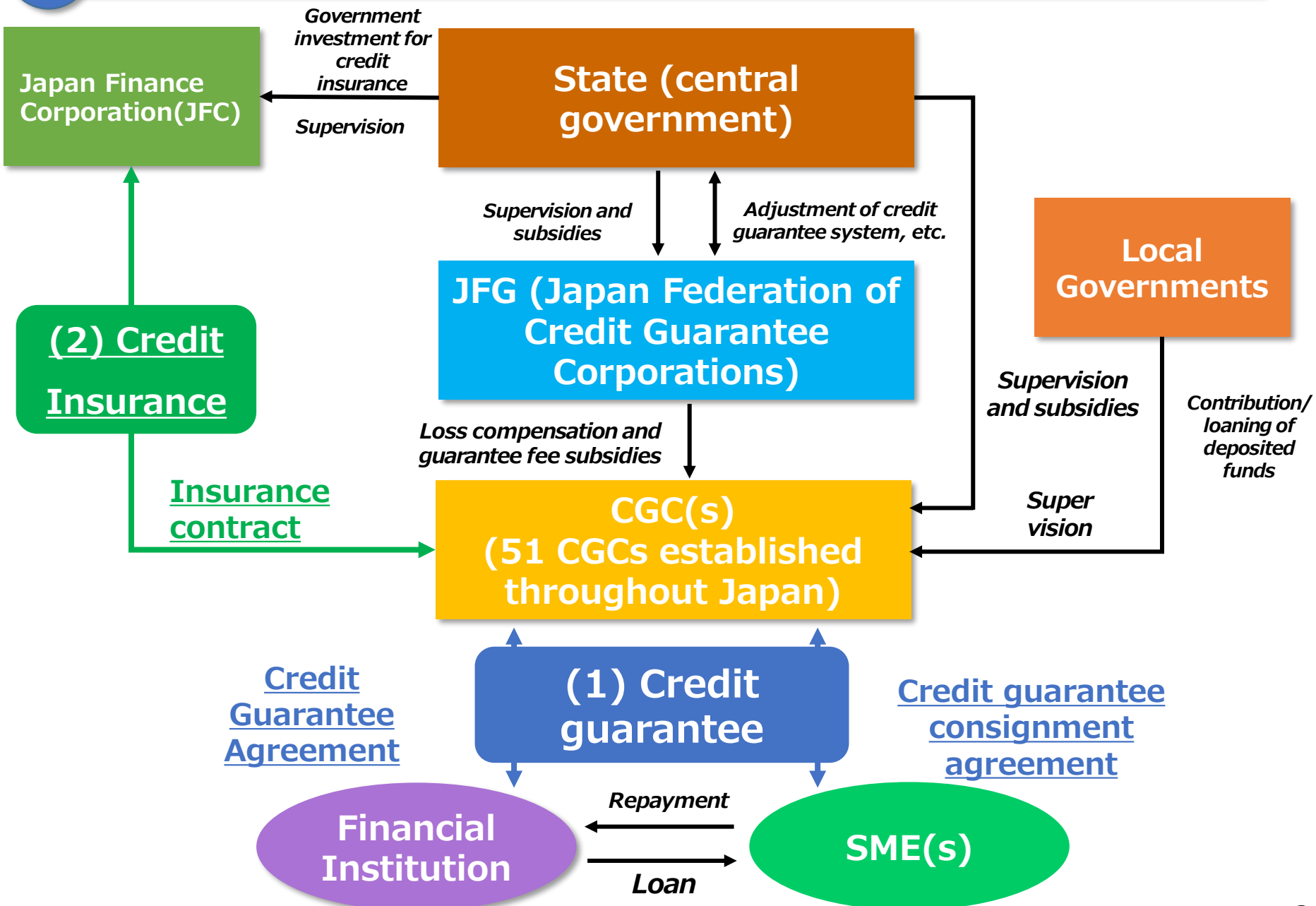
**There are 51 CGCs established throughout Japan (in 47 prefectures and 4 cities).**

### JFG

**Number of Executive Officers and Staffs: 61**  
**Main business: Coordination between credit guarantee corporations and the government, administration of loss compensation, etc.**

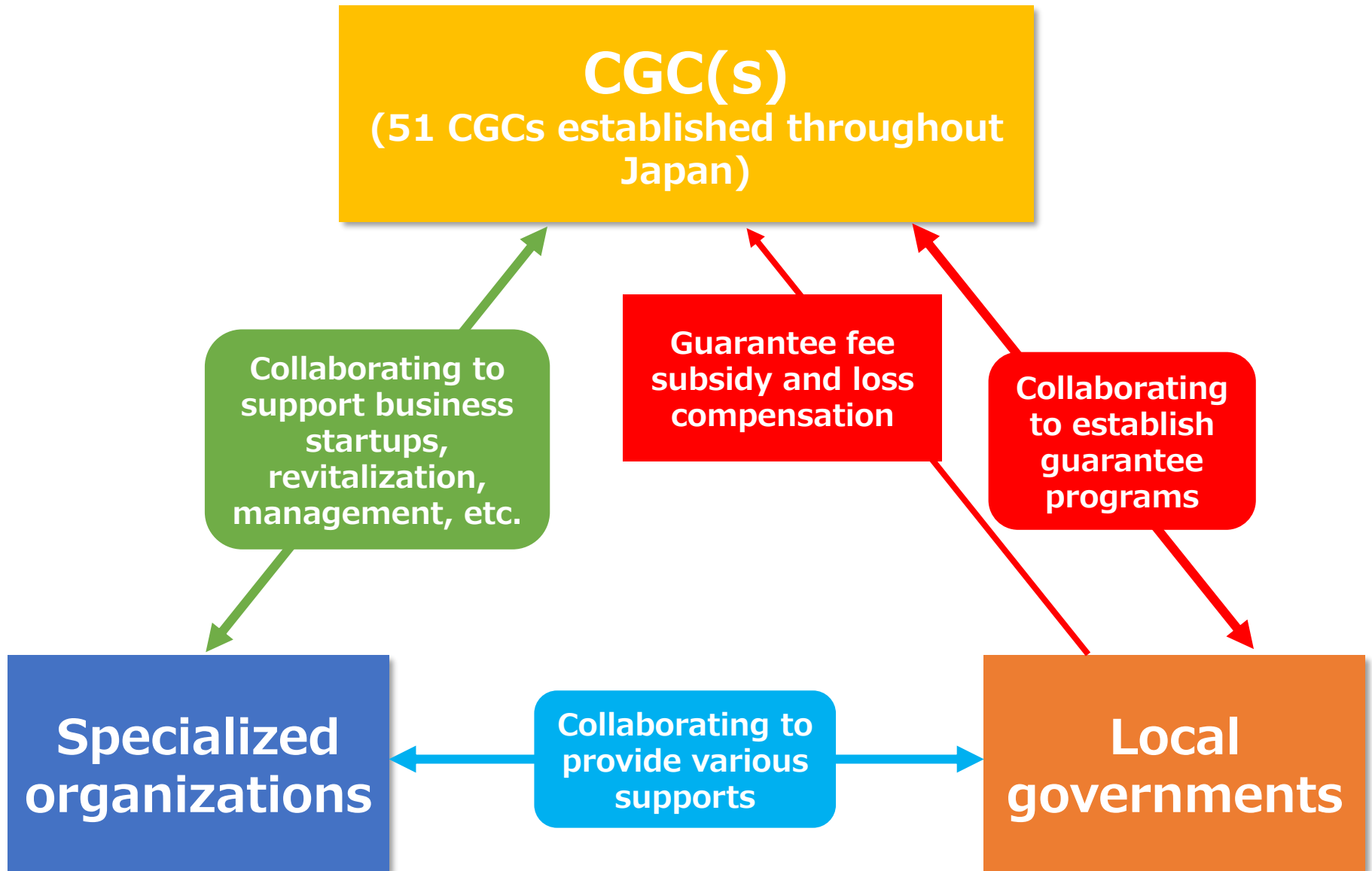
# 2

## Structure of Credit Supplementation System



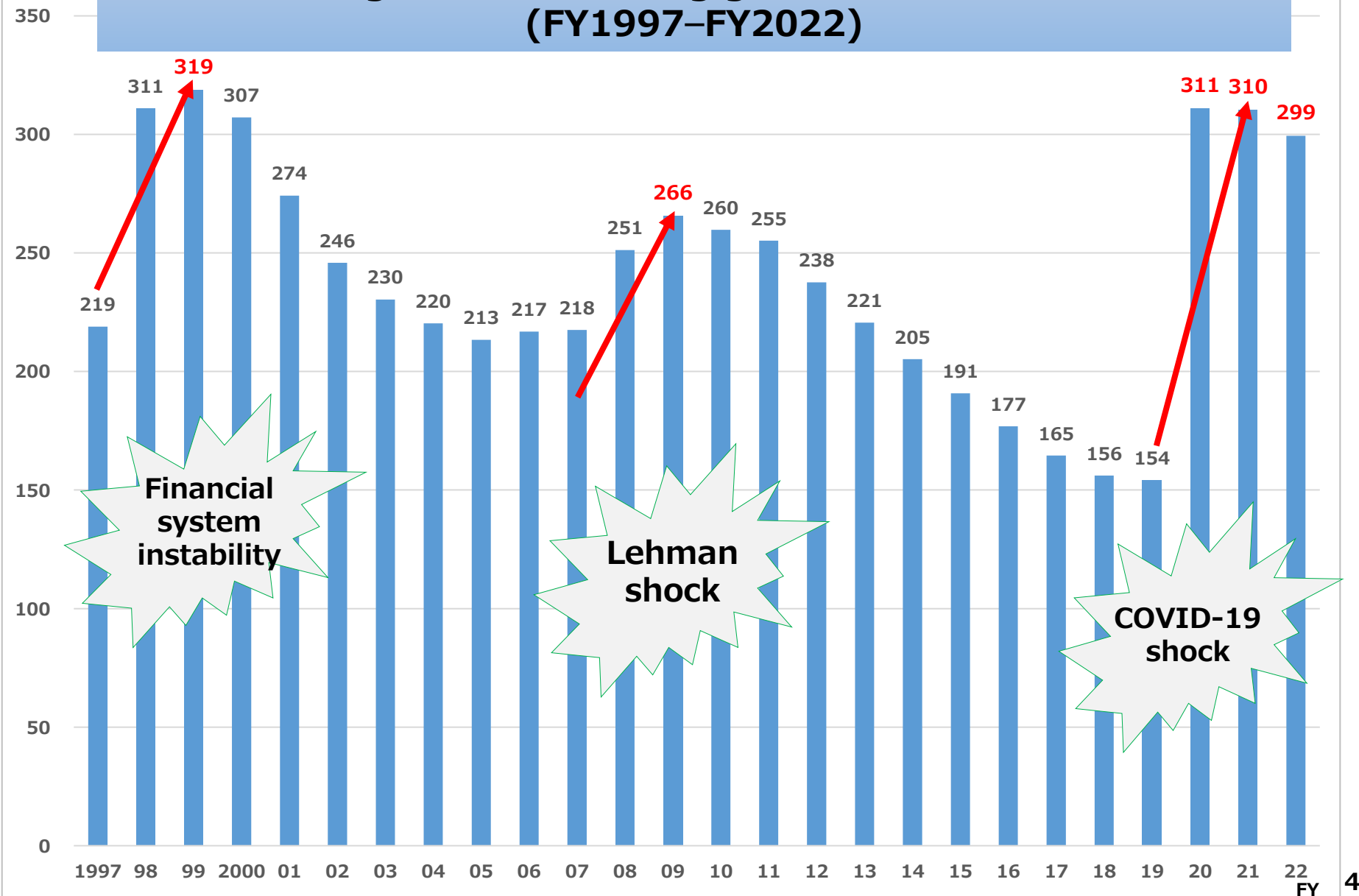
# 3

## Cooperation with Local Governments and Specialized Organizations in the Credit Guarantee System



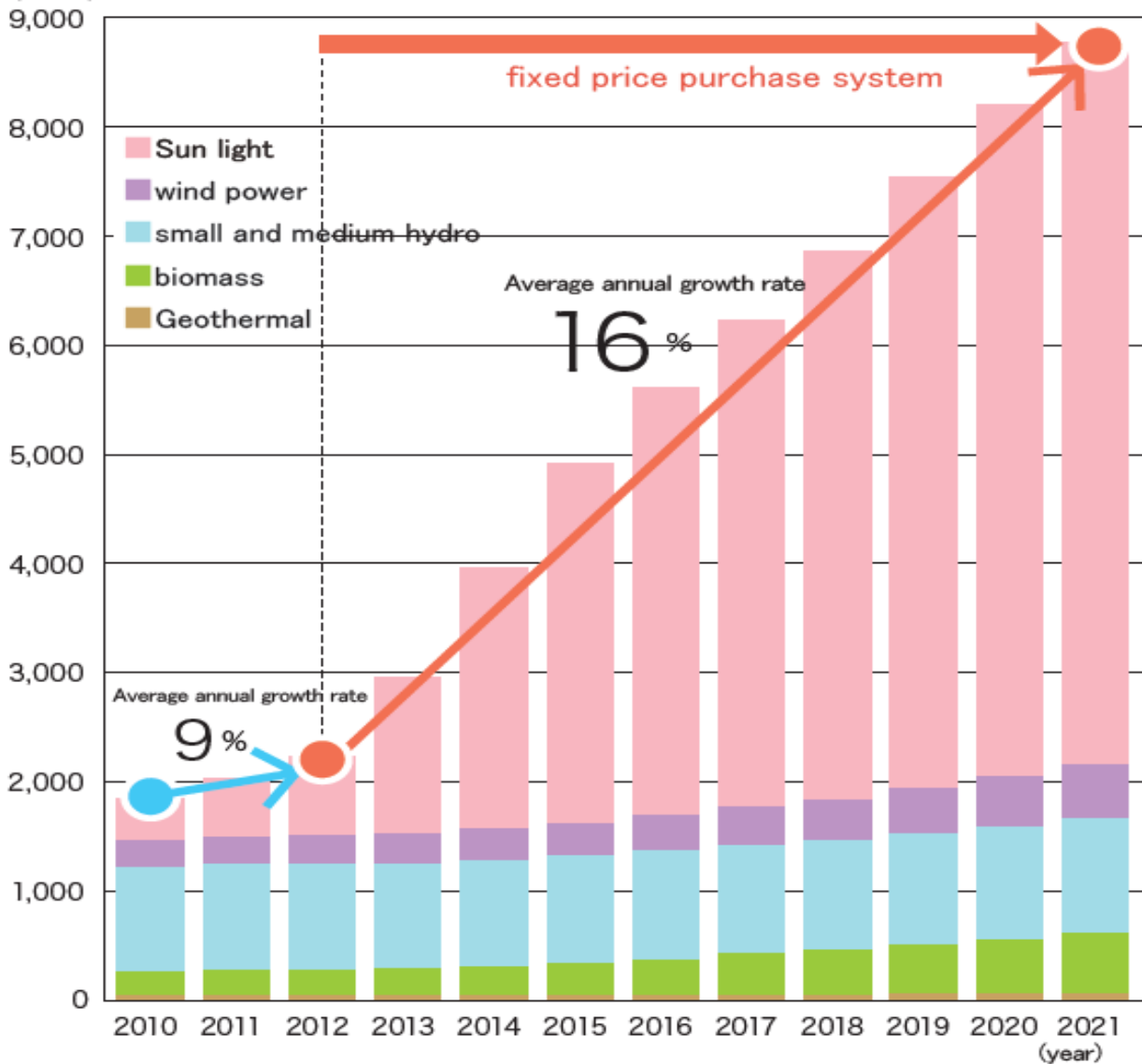
Billion  
dollar

## Changes in outstanding guaranteed liabilities (FY1997–FY2022)



### Changes in installed capacity of renewable energy (excluding large-scale hydropower)

(万kW)



Source :  
Agency for Natural Resources and Energy

**Aomori Pref.**

Challenge Fund for  
"Aomori to be Chosen"

**Akita Pref.**

Renewable Energy Industry Entry  
Support Fund

**Yamaguchi Pref.**

Decarbonized Management  
Future Investment Support Fund

**Kumamoto Pref.**

Kumamoto Green  
Guarantee

**Fukushima Pref.**

Fukushima Industry  
Development Fund

**Yokohama City**

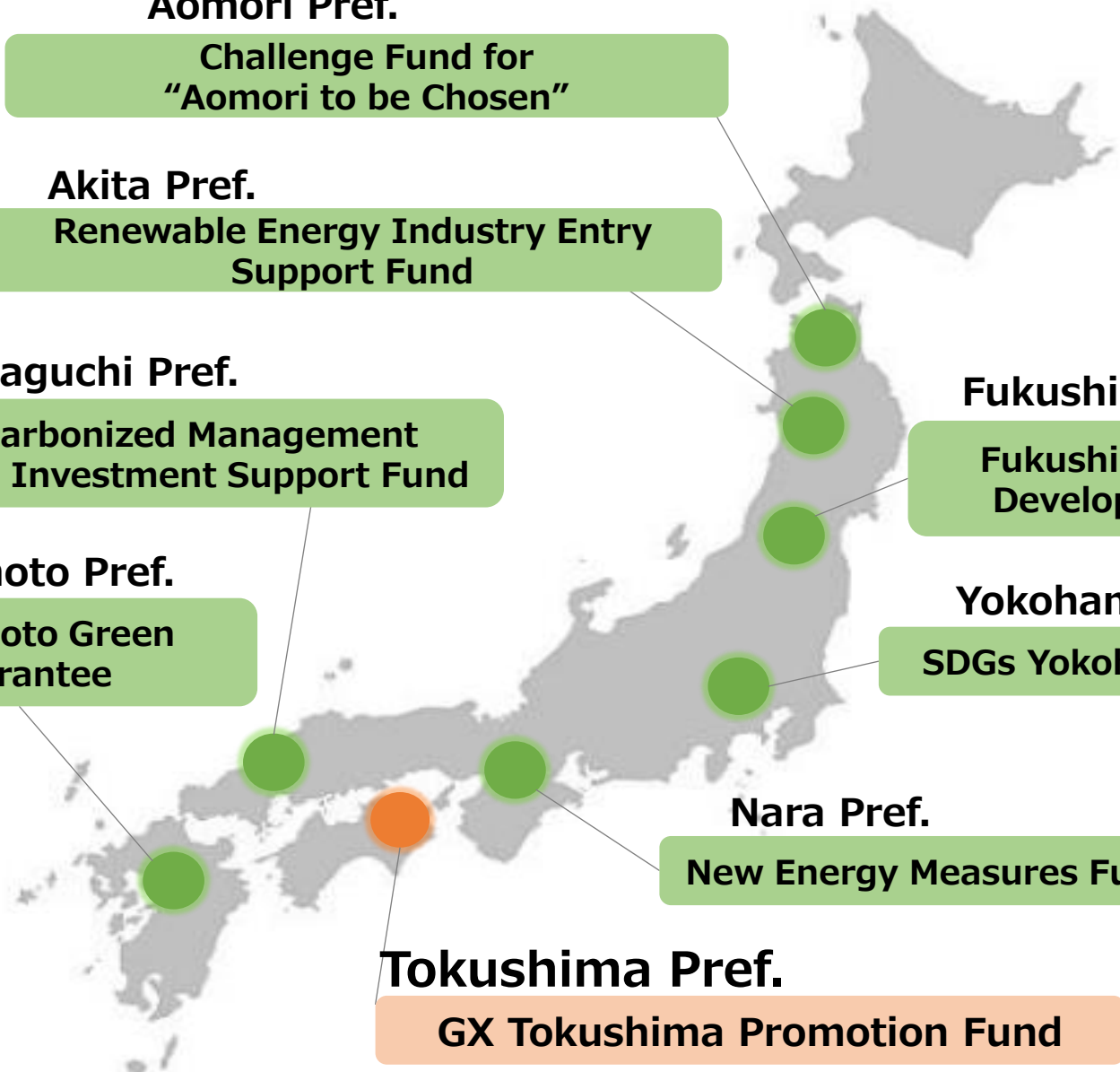
SDGs Yokohama Fund

**Nara Pref.**

New Energy Measures Fund

**Tokushima Pref.**

GX Tokushima Promotion Fund



## 7

## Features of the Guarantee Program for Renewable Energy

| Prefecture | Guarantee program                                      | Local government support |                  | Features    |                        |
|------------|--|--------------------------|------------------|-------------|------------------------|
|            |  | Guarantee fee subsidy    | Interest subsidy | Loan period | Guarantee fee discount |
| Aomori     | Challenge Fund for "Aomori to be Chosen"               | ◎<br>(up to 100%)        | ○                | 15 years    | —                      |
| Akita      | Renewable Energy Industry Entry Support Fund           | ◎<br>(100%)              | ○                | 15 years    | —                      |
| Fukushima  | Fukushima Industry Development Fund                    | —                        | ○                | 15 years    | ○                      |
| Yokohama   | SDGs Yokohama Fund                                     | ○<br>(25%)               | ○                | 20 years    | —                      |
| Nara       | New Energy Measures Fund                               | ◎<br>(up to 100%)        | —                | 15 years    | —                      |
| Yamaguchi  | Decarbonized Management Future Investment Support Fund | —                        | ○                | 15 years    | ○                      |
| Kumamoto   | Kumamoto Green Guarantee                               | —                        | ○                | 20 years    | ○                      |



### Overview of Tokushima Prefecture

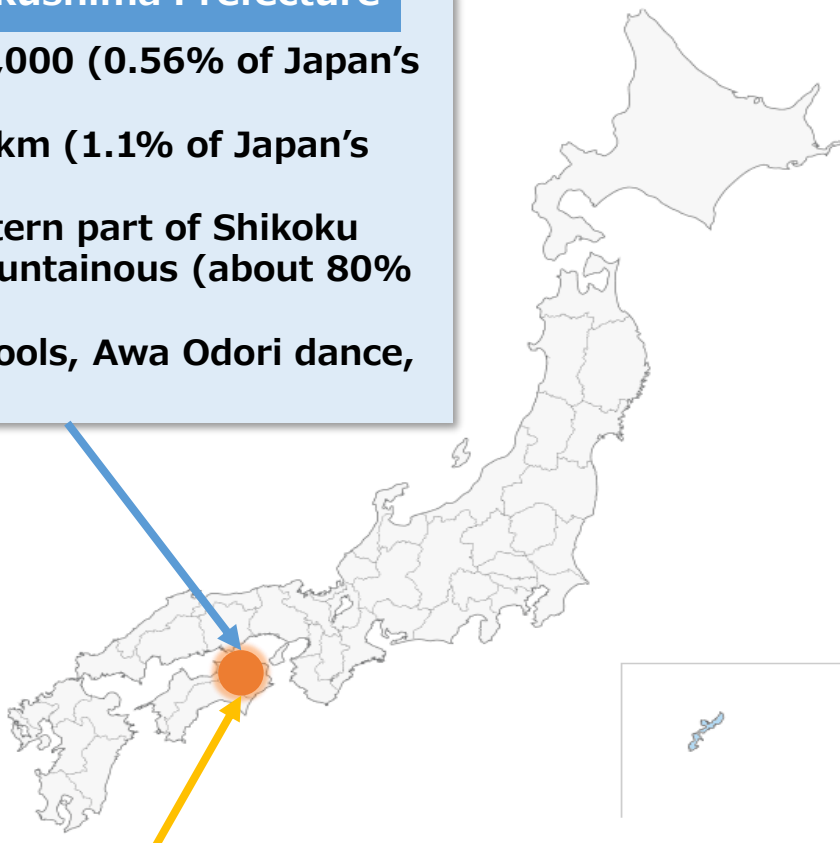
**Population:** 700,000 (0.56% of Japan's population)

**Area:** 4,145 sq. km (1.1% of Japan's area)

**Geography:** Eastern part of Shikoku

**Topography:** Mountainous (about 80% of total area)

**Tourism:** Whirlpools, Awa Odori dance, vine bridge



### CGC of Tokushima-ken

**Established:** December 1949

**Number of Executive Officers and staffs:** 56

**Outstanding guaranteed liabilities:** 1.99 billion dollar (0.66% of Japan's total)

**Number of guarantee programs:** Approximately 100

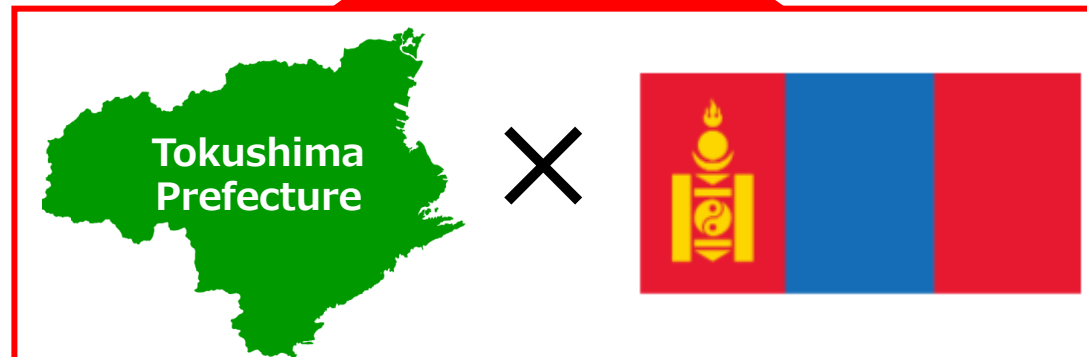
## Honorary Consulate of Mongolia in Tokushima

Mongolia's sixth consulate established in Japan

- (1) Support for Mongolian culture, tourism, and industrial technology
- (2) Support for Mongolian people living in Japan
- (3) Publicity activities for Mongolia



Exchanges



Sumo  
wrestling



Yokozuna Hakuho's  
wife is from  
Tokushima Prefecture

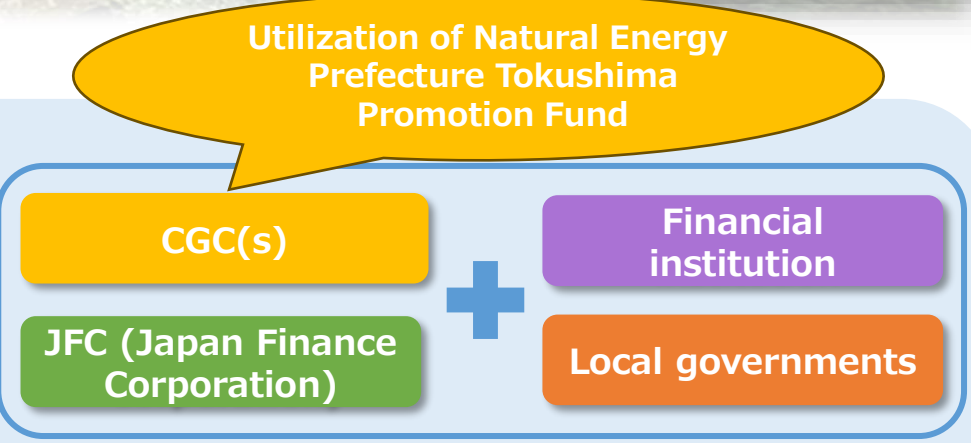


|   |   |
|---|---|
| <b>Location</b>                               | Tsurugi-cho, Mima-gun, Tokushima  |
| <b>Industry</b>                               | Electricity (small hydropower generation*)  |
| <b>Established</b>                            | Established in July 2004<br>(Started small hydropower generation business in June 2021) |
| <b>Details of small hydropower generation</b> | Maximum receiving power: 49.9 kW<br>Projected annual power generation: 362,000 kWh      |

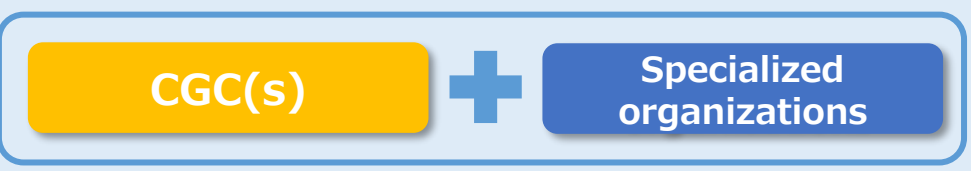


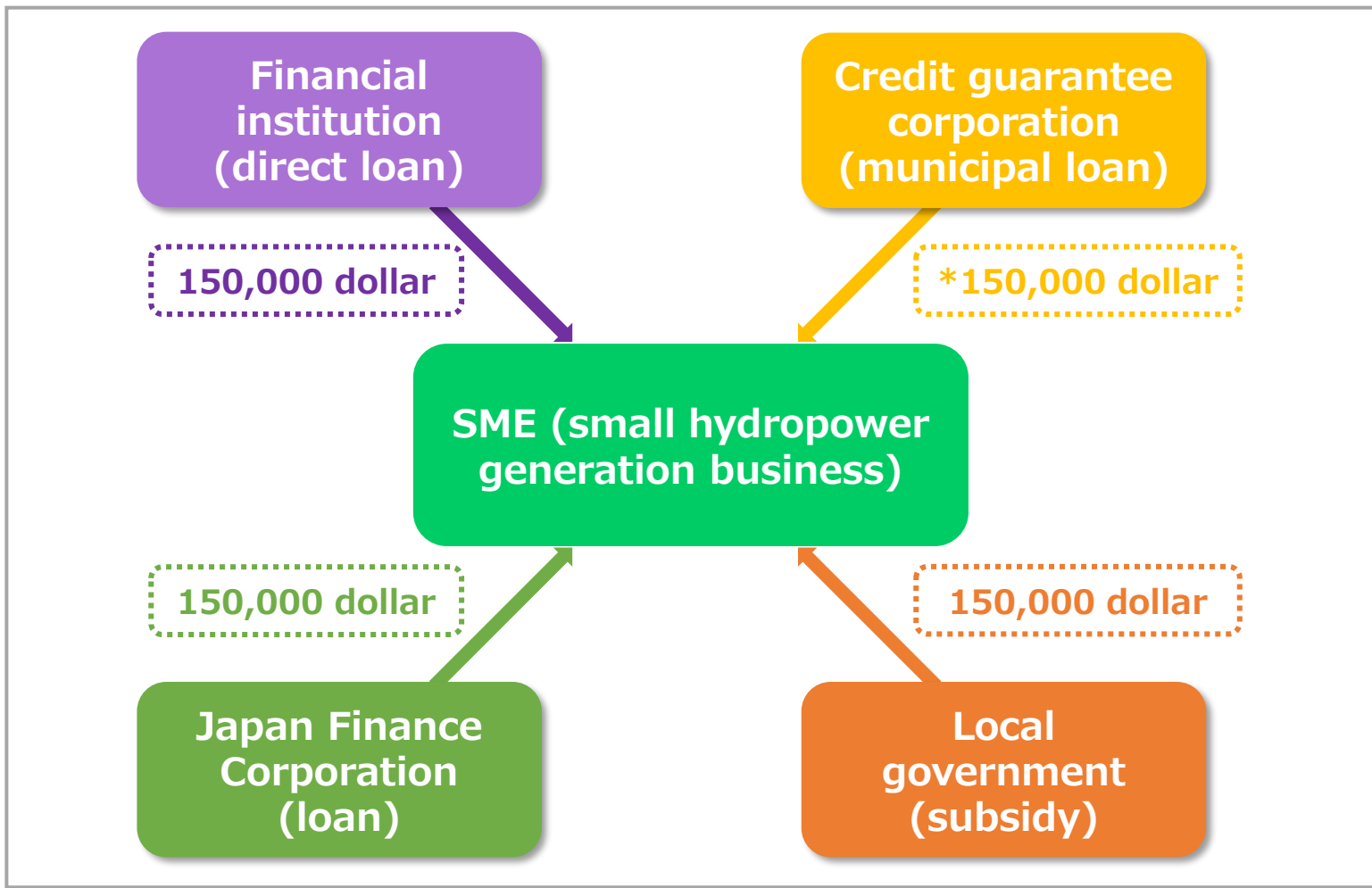
## Challenges and Responses of Small Hydropower Generation Business

**Fundraising** ← **Financial support**



**Legal procedures** ← **Advice, etc.**





[Overview of Guarantee Program]

Program name: Natural Energy Prefecture Tokushima Promotion Fund

Loan period: 15 years

Local government support: Subsidizing the guarantee fee

\*A financial institution provides the loan guaranteed by the credit guarantee corporation.



# Thank you for your attention



**35th ACSIC  
CONFERENCE  
August 2023**



Japan Federation of  
Credit Guarantee Corporations

**Japan Federation of Credit  
Guarantee Corporations**

<https://www.zensinhoren.or.jp/>



**LEVERAGING CAPITAL FOR  
ENVIRONMENTAL AND SOCIAL  
GOOD IN MONGOLIAN  
CAPITAL MARKET**



# MARKET OVERVIEW

## GROWTH

- Market cap: **USD3.2 billion**
- **3-fold increase since 2020**

## PRODUCTS

- Stocks: **186**
- Bonds: **20**
- Closed-end funds: **2**
- Asset-backed securities: **8**
- Commodity: **6 types of coal**

## AVERAGE DAILY TURNOVER

**USD 4 million**  
(securities and commodity)

## INFRASTRUCTURE

- Number of people who hold securities accounts: **2.5 million /75% of the population/**
- Online trading: **100%**

## Bloomberg

highlighted the Mongolian stock market as the **World's Best Stock Market of 2021**, with 130% returns.

- ✓ The first dual-listing  
TSX: ERD  
MSE: ERDN

**2018**

- ✓ T+2 settlement cycle
- ✓ The first closed-end fund

**2019-2020**

- ✓ The first asset-backed security
- ✓ The largest closed-end fund: **₮50 billion**
- ✓ FTSE Equity Markets Watch List

**2021**

- ✓ 10-100% reduction in Listing and trading fees
- ✓ Systemically important banks IPO
- ✓ **SOEs privatization: MSE**
- ✓ Corporate sustainability reporting standard
- ✓ FTSE Russell Frontier Market

**2022**

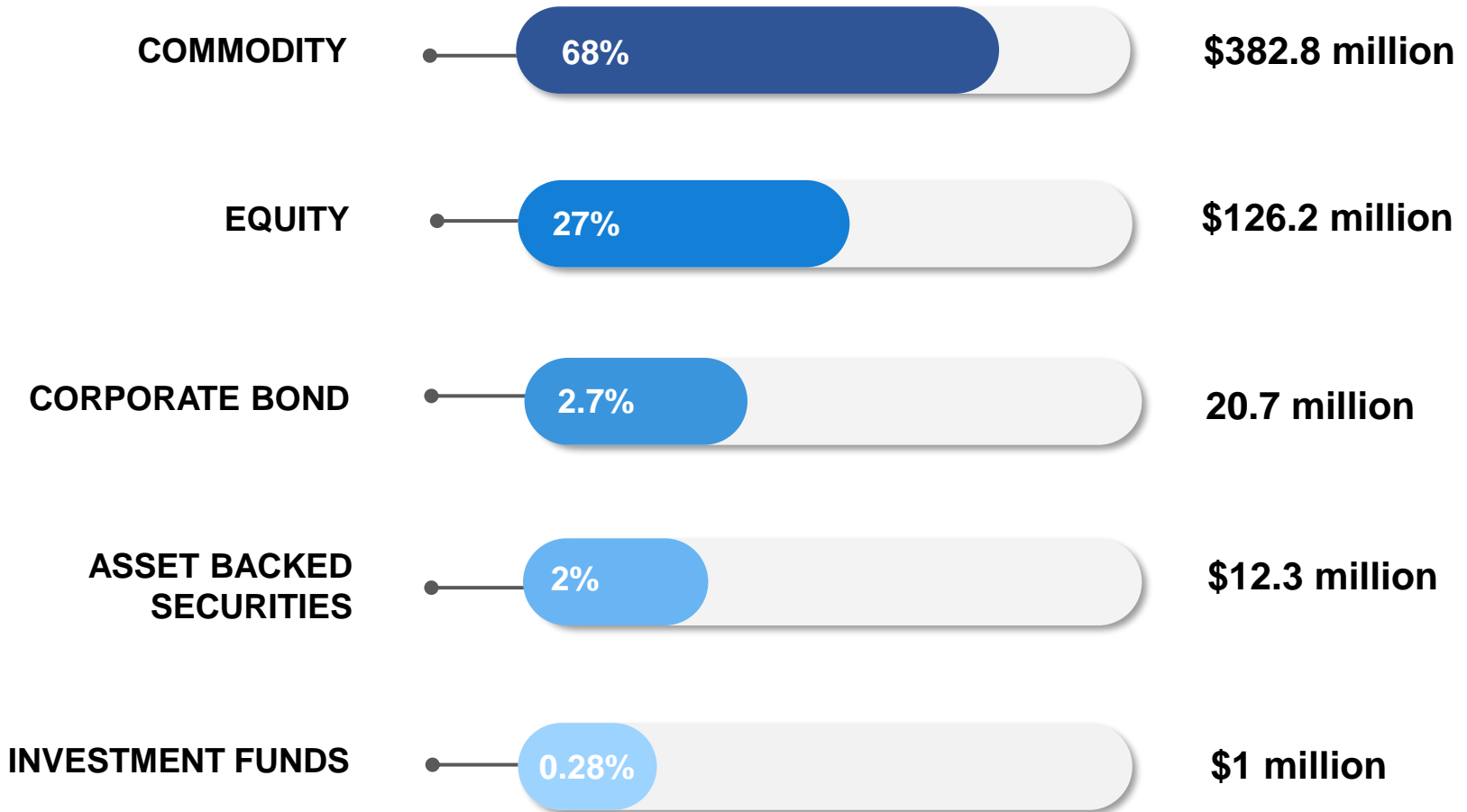
- ✓ Cross border coal trading
- ✓ Mining Commodities Exchange
- ✓ Largest IPO: Khan Bank

**2023**



# TRADING TURNOVER

July 25, 2023



Total trading turnover  
~USD 543 million

Daily average  
USD 4 million

# PRODUCT PIPELINE

2020

2021

2022

2023



/Bond/

/Bond/



/Bond/

/IPO/



/ABS & Bond/

/Bond/



/IPO/

ҮНДЭСНИЙ ДАВХАР ДААТГАЛ

/IPO/



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/Fund/



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/IPO/



/IPO/



/ABS/



/Bond/

/ABS/



/ABS/



/ABS/



/ABS/



/Bond/



/Bond/

# BANKING REFORM



2022.10



\$7.3 million



2023.4



\$53 million



2023.06



\$10.3 million



\$34.1 million



2022.11



\$23.8 million



2023.05

SUBSEQUENT  
ROUNDS OF  
BANKING REFORM



2023.12.31

# FTSE FRONTIER MARKET



2012.09.30

Included in  
FRONTIER MARKET  
WATCHLIST



2017.09.30

Removed from  
FRONTIER  
MARKET  
WATCHLIST

2021.09.30

Placed in  
FRONTIER  
MARKET  
WATCHLIST



2022.09.29

Included in the  
FRONTIER MARKET

- ✓ *The clearing and settlement process is aligned with international standards*
- ✓ *A global custodian operates in the market*
- ✓ *The trading mechanism allows for efficient price discovery, fast trade execution, and reporting*
- ✓ *Foreign and domestic investors are not distinguished*
- ✓ *No restrictions are applied to the repatriation of capital*
- ✓ *Minority shareholders are protected through company legislation*

# FTSE FRONTIER MARKET



**FTSE Frontier\***  
 \$0.1 trillion net market cap  
 314 large, mid, & small cap stocks

- FTSE Frontier Mid Cap Index
- FTSE Frontier Index
- FTSE Large Cap Index
- FTSE Frontier Small Cap Index

# MONGOLIA STOCK MARKET PERFORMANCE 2021

Bloomberg

Markets

## World's Best Stock Market of 2021 is Mongolia With 130% Returns

By [Terrence Edwards](#) and [Nikos Chrysoloras](#)  
September 16, 2021, 6:00 AM GMT+8

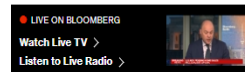
- ▶ Mongolia's MSE Top 20 Index is up by almost 130% this year
- ▶ Performance driven by booming consumption, exports to China

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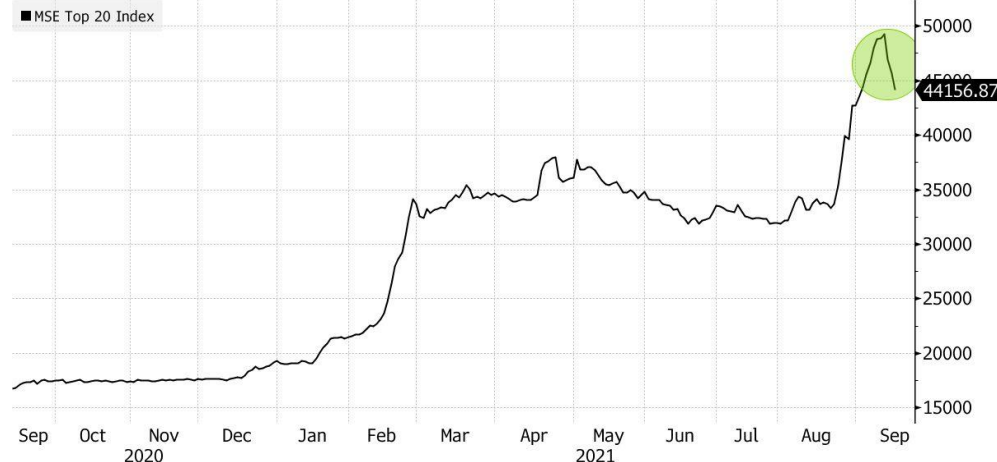
The world's hottest stock market is in the coldest of its capitals.

In a year when a seemingly unstoppable rally has pushed equities from the U.S. to Europe into successive record highs, Mongolia's minuscule bourse has emerged as the undisputed champion.

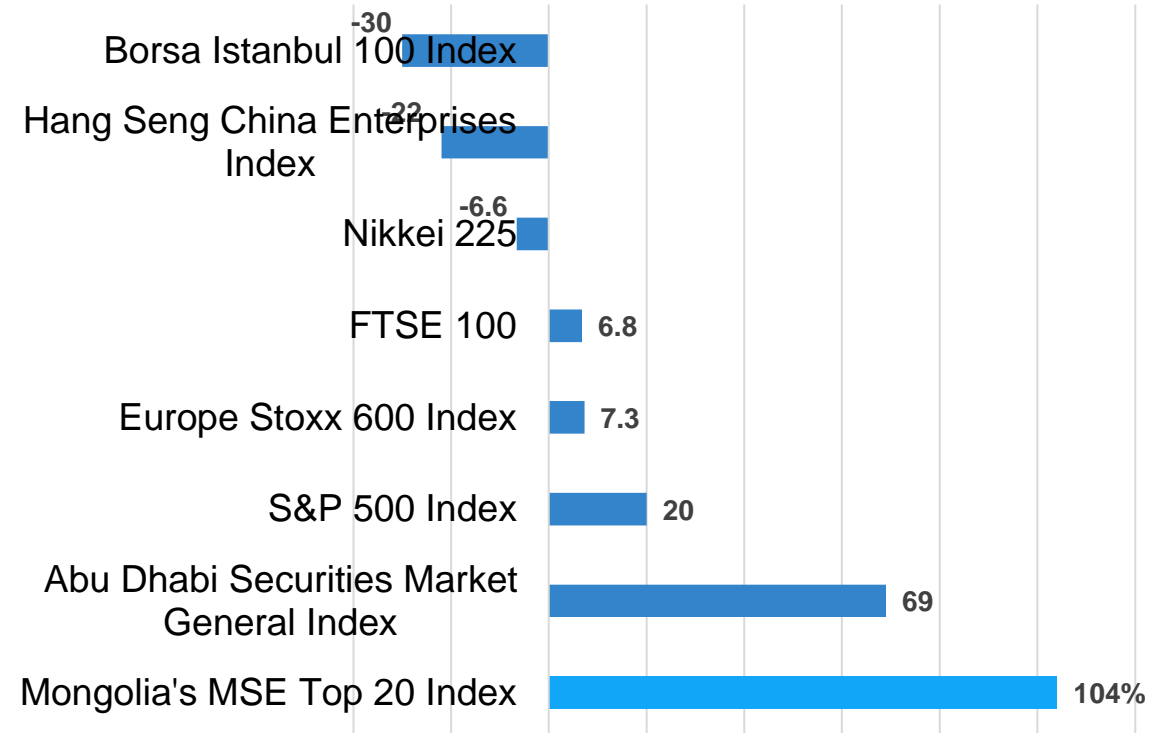


### Unlikely Champion

Even after a drop this week, Mongolian stocks are up by almost 130% in 2021

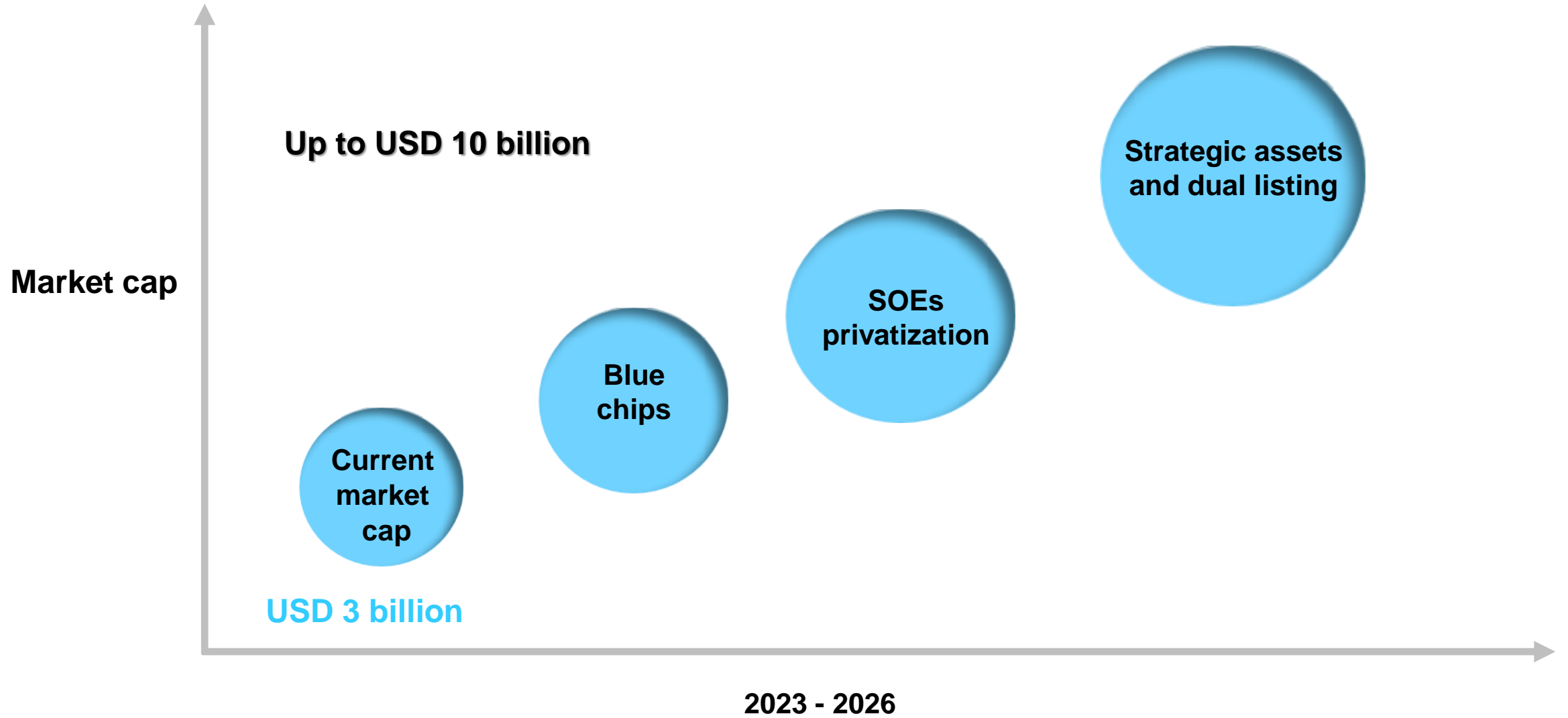


Source: Bloomberg



Bloomberg, as of Dec 2021

# MARKET OUTLOOK



# **SUSTAINABLE FINANCE IMPLEMENTATION IN MONGOLIAN CAPITAL MARKETS**



# SUSTAINABLE FINANCE IMPLEMENTATION



2017



### SSEI signed

Mongolian Stock Exchange signed the Sustainable Stock Exchange Initiative

2018



### Listing rules included sustainable instruments

Waivers and exemptions & Fee discounts for sustainable issuers

2022

ESG reporting guideline & ESG reporting rules approved



ESG & SUSTAINABILITY REPORTING GUIDANCE FOR MONGOLIAN COMPANIES



### Market rules updated

- **Incentives for Mongolia Green taxonomy & SDG taxonomy aligned issuers added in the Listing Rules of MSE**
- **FRC's regulation facilitated green bond issuances**

# ESG REPORTING OF MSE LISTED COMPANIES

1. APU JSC
2. GOBI JSC
3. GOLOMT BANK JSC
4. INVESCORE NBFJ JSC
5. MIK HOLDING JSC
6. SUU JSC
7. STATE BANK LLC
8. CENTRAL EXPRESS CVS JSC
9. UVS KHUNS JSC

**APU COMPANY**  
Absolute. Pure. Unique.

**InvesCore**  
САНХҮҮГИЙН БАЙГУУЛЛАГА

 **STATE BANK**

**GOBI**

**MONGOLIAN CASHMERE**

**MIK**  
MIK HOLDING  
JOINT STOCK COMPANY

 **CENTRAL**  
express | 



**GOLOMT BANK**  
*Committed to and Investing in Excellence*

  
СҮҮ Хувьцаат Компани

  
УВС ХҮҮНС ЖСХ

# SUSTAINABLE FINANCING IMPLEMENTATION ROADMAP

2022

Trainings for issuers



2023



- The first green bond was approved for listing: **Khan Bank to issue \$30m green bond**
- Train-the-Trainer program and training for investors and other market participants to be organized
- Support thematic bond issuances – **Green, social and sustainable bonds**
- Promote gender equality through the capital market: **Percentage of women on board 27%** (23% for G20 listed companies)

2024-



- Mandate Tier 1 companies compliance with ESG reporting
- Creation of a sustainability leaders index and sustainability ETF
- Official recognition and certificate for best ESG standard compliers
- Social stock exchange: special platform for social projects
- Launch carbon trading



**THANK YOU FOR YOUR ATTENTION**



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## Looking Ahead: Fostering Green Financing For Sustainable



## Managing The Risk To Optimize The Green Financing Program

Presented by: Ceriandri Widuri

Mongolia, August 9<sup>th</sup> 2023



**Climate Change As The Main Risks In Emerging Global Risks**



**The Indonesia's Commitment To Mitigating Climate Change**



**The Sustainable Finance Of Indonesia**



**Building a Sustainable Finance Ecosystem**



**Potential Instruments For Private Sector Investment Mobilization**



**Green Financing Program in Banking Credit Policy in Indonesia**



**The Important Role of Risk Management in Achieving Sustainable Finance Goals**









## Identify The Most Severe Risks on Global Scale over The Next 10 years



## How To Manage Climate Risk

**All organizations, including municipalities, must manage the physical, transitional risks and liability risk posed by climate change. To manage climate risk, organizations must consider the following three factors.**

## Climate-related Risks

| Physical Risk   | Transition Risk  | Liability Risk   |
|---|--|--|
|  <p>Climate induced natural disaster</p> |  <p>Changes</p>             |  <p>Penalties resulting from stakeholders' litigation</p> |
|  <p>Sea level rise</p>                   |  <p>Innovation</p>          |  |
|  <p>Extreme weather events</p>           |  <p>Consumer preference</p> |  <p>Regulatory Enforcement</p>                            |

### Assess And Manage Climate Risk

Managing Physical Risk in the organization is the main one. The organization shall carry out climate risk and vulnerability assessments to identify and measure key climate risks, monitor them, and implement adaptation actions and plans to control risks.

### Minimize Your Impact on the Environment

Governments and communities share responsibility for reducing global greenhouse gas emissions, as well as local impacts on the environment such as air, water and waste pollution. Preparing for and anticipating a low-carbon transition can help minimize Transition Risk. Global climate change mitigation also helps reduce the Physical Risk from climate hazards.

### Support of Stakeholders) In Low-carbon Transition

Governments and organizations can play an important role in influencing changes in people's behavior and working with businesses to support their low carbon transition. Involving all stakeholders in this process can help reduce overall Transition Risk.

## Paris Agreement on Climate Change



Reducing greenhouse gas emissions by keeping global temperature rise at 1.5°C

Indonesia has determined the national contribution as outlined in:

- First NDC Republic of Indonesia in 2016
- Updated via Updated NDC Republic of Indonesia in 2021

- 1) Sustainable Finance (SF): a financial system for financing SDGs projects;
- 2) SF is an OJK initiative to prepare the financial services industry to support sustainable (low carbon) economic growth as stated in the sustainable finance roadmap.
- 3) Benefits of sustainable finance for Financial Services Authority and the Financial Services Industry:
  - **Stability:** Improving the resilience of the IJK against environmental and social risks as well as deepening financial markets (financial products and services);
  - **Sustainable Economic Growth:** Increasing the contribution of the FSI in providing funding for SDGs and climate change.
  - **Inclusive:** expanding access to funding for people affected by climate change and reducing income gaps

- Global Agreement:**
- Paris Agreement on Climate Change 2015-2030
  - UN Sustainable Development Goals (SDGs) 2015-2023
- National Commitment**
- Law No 16/2016 ratification of the Paris Agreement
  - Presidential Regulation 59 /2017 SDGs
  - Next RPJMN 2015-2019 2020-2024
- Stakeholders Expectations**
- OJK's active role
  - IJK takes environmental and social care
  - Provision of IJK funding for SDGs and Climate Change



- Indonesia has ratified the Paris Agreement into Law no. 16 of 2016 concerning Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change.

- Indonesia is committed to reducing greenhouse gas emissions from business as usual levels in 2030 by:



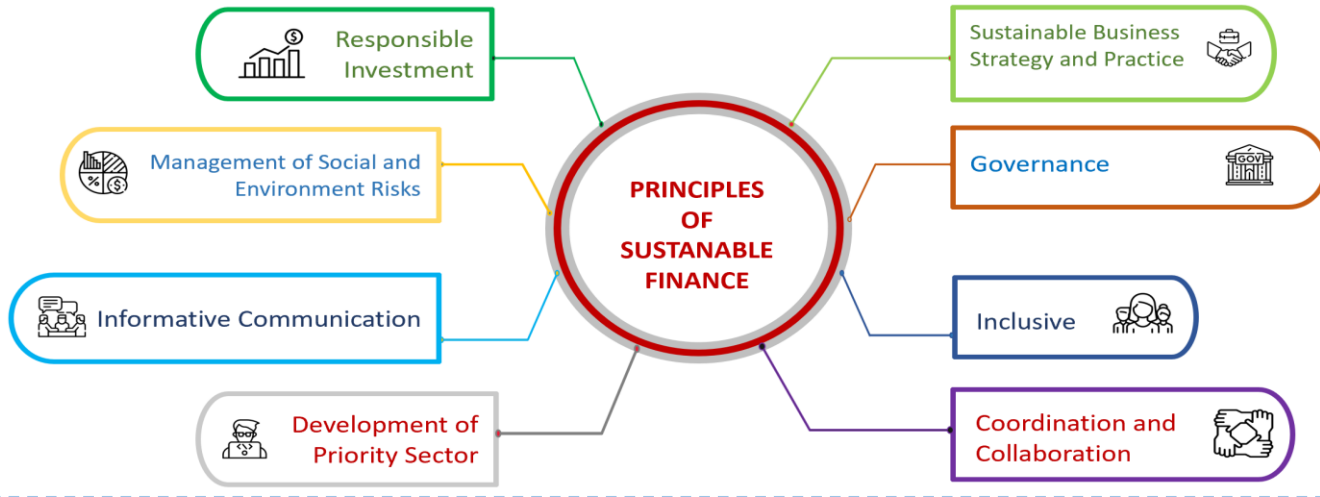
29% through national efforts



41% with International support

The need for climate action to reduce carbon emissions is very large, it requires the mobilization of funds from the private and non-governmental sectors (including philanthropists) to support public/government funds which are still limited.





- Sustainable Finance is comprehensive support from the financial services sector to achieve sustainable economic growth by aligning economic, social, and environmental interests.
- The greatest challenge to implement sustainable finance is to convince business players and society that in performing activities that generate profits, limited natural resources and the social impacts on society need to be considered. This is known as the **profit, people, and planet (3P) principles**. Thus, there is a need for an initiative to change the mindset of business players from pursuing short-term profits into long-term prosperity.
- In the Phase I Roadmap SF by Financial Services Authority has resulted in several initiatives that become the foundation to shift the business players' mindset.
  - 1) Financial Services Authority (FSA) introduced eight principles of Sustainable Finance. These eight principles serve as the basis for financial industry players in developing their activities.
  - 2) Financial Services Authority requires players in the financial services industry to devise a strategy that contains the implementation of environmental, social, and governance principles in their business plan and to submit a public report containing the implementation of the ESG principles.
  - 3) Financial services Authority has classified a number of Sustainable Business Activities Categories. This category will serve as a reference for classification of the green sector for the financial industry in the hope that it will expand the portfolio to support sustainable finance development. In order to raise interest of the industry on sustainable finance, FSA also issued a regulation, coupled with incentives, for issuing green bonds/sukuk.
  - 4) In addition, FSA also conducted a series of awareness programs to improve the industry's understanding on responsible economic activities.

## Indonesia's Sustainable Finance Action Plan For The Period 2015 - 2024

### Strategic Goals

### Actions and Tools

Increase Supply of Sustainable Finance

- Develop policies/regulations to increase sustainable finance portfolios of FIS (2015-2016).
- Provide prudential incentives (2015-2016)
- Offer fiscal and non fiscal incentives, including tax holidays, feed in tariffs, targeted loans, and **GUARANTEE SCHEMES** (2016-2018).
- Establish a special award for FIS setting the highest standards in sustainable financing (2016-2024);
- Develop green products for both banking and nonbanking sectors (2015-2024);
- Spur the development of the domestic green bond market by providing government institutions and industry practitioners with adequate support (2015-2024);
- Organize environmental analysis trainings of the staff of FIS and the Financial Services Authority (2015-2019);
- Develop green lending models for priority sectors (2015-2019);
- Create information hub (2016);
- Carry out joint research on sustainable finance with national and international research institutes (2015-2024)

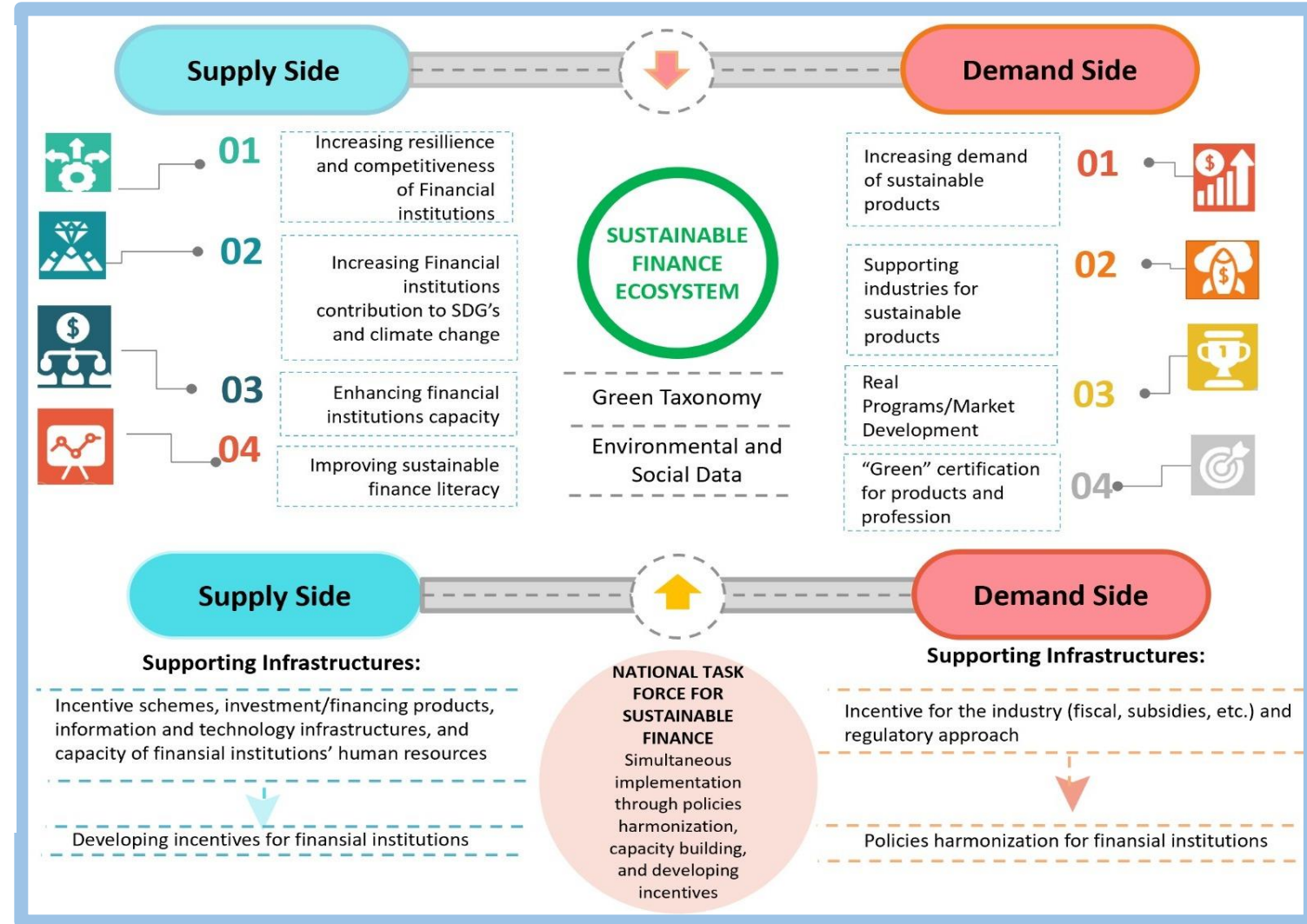
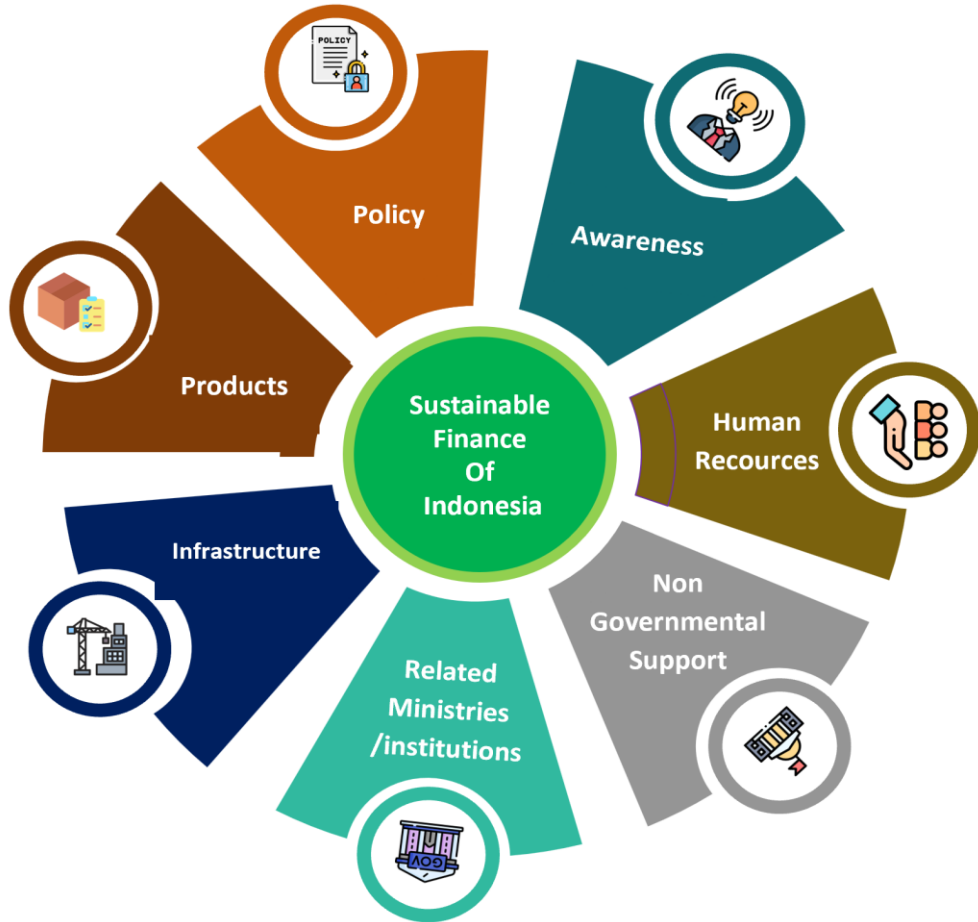
Increase Demand from Investors for Sustainable Finance Products and Services including Green Products

- Increase access of FIS to Global Public Funds, considering a risk mitigation mechanism (2015-2016);
- Implement an outreach campaign program to enhance public understanding of sustainable finance (2015-2019)

Enhance Oversight and Coordination in The Implementation of The Sustainable Finance Program among The Relevant Ministries/Agencies

- Issue an umbrella policy and regulation on sustainable finance, laying down principles and supervision guidelines on the implementation of Indonesia's sustainable finance program (2015-2016).
- Gradually make sustainability reporting mandatory to ensure its transparency to the public and supervision of the financial services Authority (2016-2017);
- Establish a Sustainable Finance Forum (2015-2024).

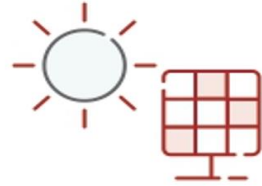
# THE SUSTAINABLE FINANCE ECOSYSTEM



# SUSTAINABLE BUSINESS ACTIVITIES CATEGORY



*Renewable Energy*



*Energy Efficiency*



*Pollution Prevention and Control*



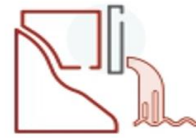
*Sustainable Natural Resources and Land Use*



*Terrestrial and Aquatic Biodiversity Conservation*



*Sustainable Transportation*



*Sustainable Water and Wastewater Management*



*Climate Change Adaptation*



*Eco-efficient Products*



*Green Building*



*Other Environmentally Friendly Business Activities*



*Micro, Small, and Medium Enterprises (MSMEs)*

## POTENTIAL INSTRUMENTS FOR MOBILIZING PRIVATE SECTOR INVESTMENT

### Funding Instruments (Loans)

#### PUBLIC-PRIVATE PARTNERSHIP

PPP is perfect for infrastructure projects aimed at improving climate resilience

#### GREEN FINANCE

Suitable for large-scale investment. Indonesia can build on its experience and leading regional status in (green) financing

#### MACRO FUNDING

has the potential to help small businesses like smallholders invest in improving their climate resilience

### Business Ethics

#### CORPORATE SOCIAL RESPONSIBILITY (CSR)

Interest from the government is available and must be utilized sustainably.

#### CORPORATE SHARED VALUE

can be thought as a way to increase the resilience of the surrounding community

#### BUSINESS CONTINUITY PLAN (BCP)

Considered as an important instrument for translating climate resilience in business, and can be applied in all sizes of businesses because of its flexibility

### Risk Mitigation instruments

#### INSURANCE

The implementation of agricultural insurance, although still limited, is quite advanced compared to other sectors. The key is to increase knowledge about climate risk and promote the importance of insurance.

#### GUARANTEE

It is currently available as a standard product from financial services providers. However, in terms of increasing private investment in public projects, the government needs to review the possibility of providing **GUARANTEES** to increase interest.

### A. GREEN FINANCE

Green Finance is all encompassing area of “sustainable” project financing, and includes many sectors from environment, agriculture, infrastructure and energy.

**That use of financial products and services**, such as loans, insurance, guarantee, stocks, private equity & bonds.

#### **in green (or eco-friendly) projects**

Green finance is more than climate finance, but includes land, forests, water, oceans, conservation, resilience.

Green finance actually covers a very broad set of topics ranging from impact investing to securities regulation to national “green” banks.

### B. Debt Finance

**Notes, bonds, loans, debentures, certificates, mortgages, leases & other agreements**

**Loan:** lending from a bank to a company, with interest payment, over specific time.

→ collateral to guarantee repayment (if difficult → equity preferred)

**SURETY BOND:** non cash loan from the Guarantee Company or Insurance to a company

### C. GUARANTEE

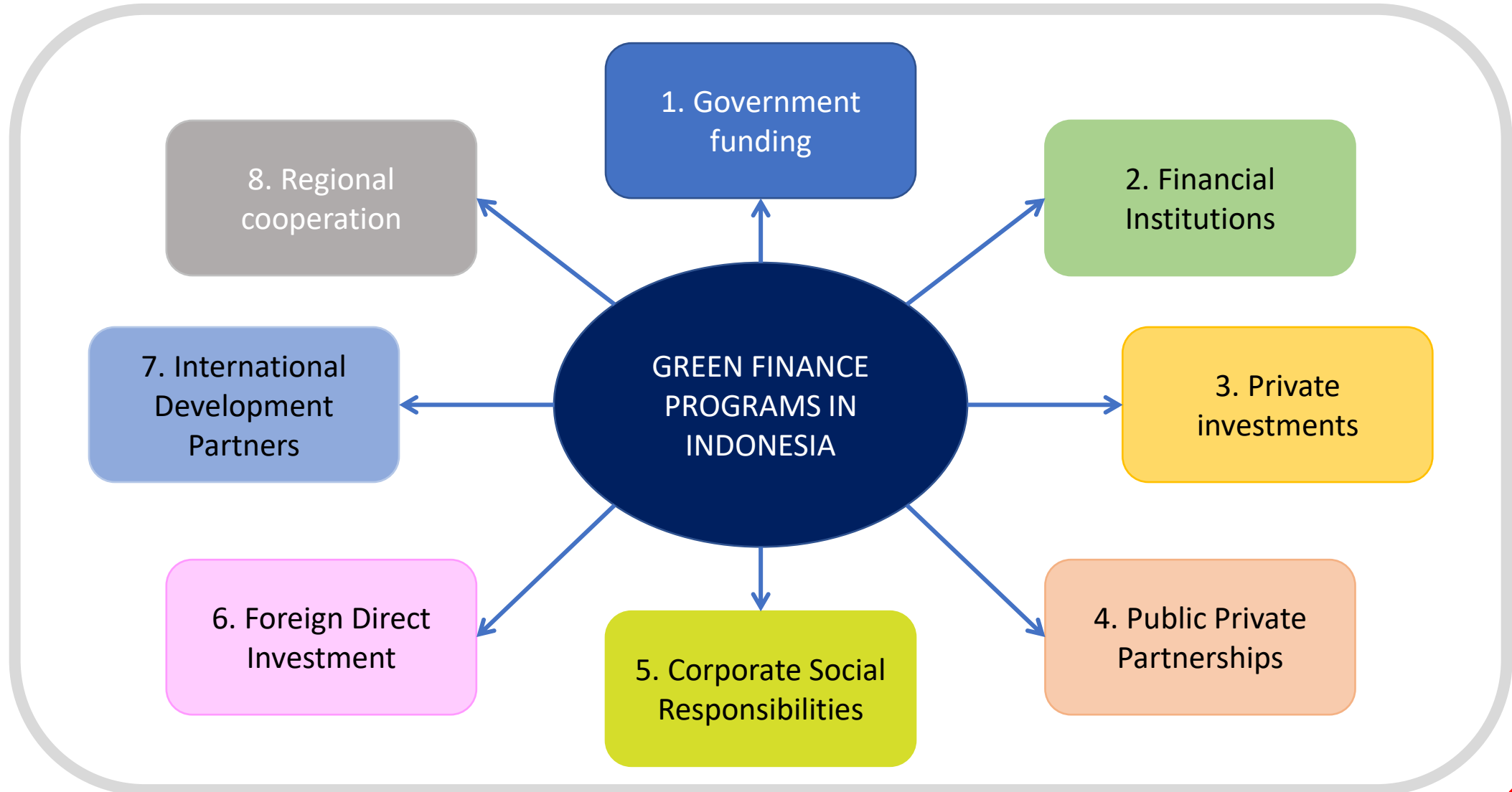
**Reduce the probability of default**

**Support the flow of private investments** - in projects where investors and lenders are seeking to mitigate risk

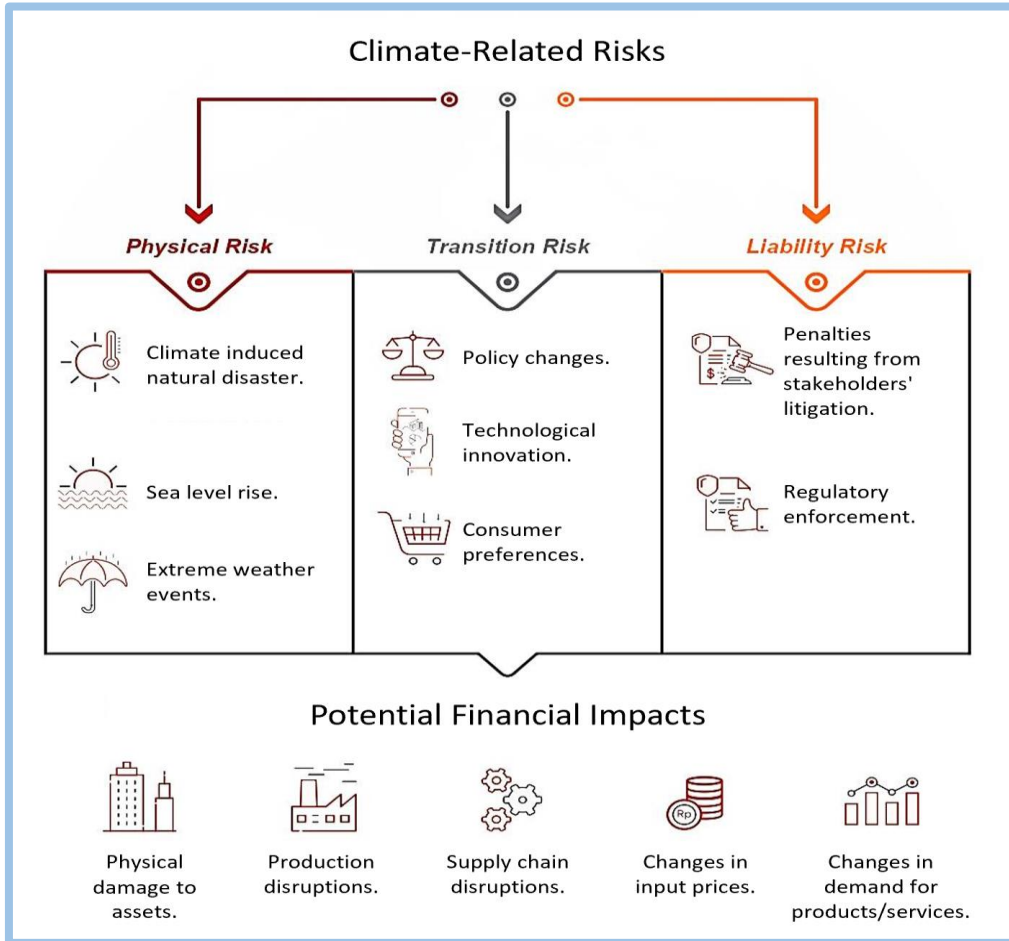
**CREDIT GUARANTEE** – covers non payment by private borrowers. Full or partial guarantee. Partial guarantee – up to a predetermined amount

**PERFORMANCE GUARANTEE** - agreement between a client and a contractor for the contractor to perform all of their obligations under the contract

## GREEN FINANCE PROGRAMS FOR LOW CARBON DEVELOPMENT IN INDONESIA



# IMPORTANT ROLE OF RISK MANAGEMENT IN THE ACHIEVEMENT OF SUSTAINABLE FINANCE GOALS



## **Risk Management Role:**

- Strategic Partner in Achieving Company Goals
- Strengthening management in Decision Making (4 Eyes Principles function)
- Ensuring the readiness of the Company in maintaining business continuity in emergency conditions (Business Continuity Management)

The transition process towards a low-carbon economy is inseparable from risks. Increasing environmental, social, and governance risks are a challenge for Risk Management so that the transition process can be carried out in an orderly manner so that risks can be handled properly.

## Efforts to Adjust Company Risk Management to Climate Change:

1. Gather information on future climate risks
2. Review and measure the impact of climate change on various existing risks (i.e. Credit Risk, Operational Risk, etc.)
3. Develop adequate risk assessment tools and methodologies
4. Develop risk management expertise, especially related to low-carbon technology

Every company must include climate change risk in its internal governance procedures, in line with the company's risk identification, control structure, and reporting.



*Thank You*





# ESG management support for Small Biz through Green Guarantees

The 35<sup>th</sup> ACSIC, Mongolia  
2023. August. 9th



**KOREG**

# Contents

- I Overview of KOREG
- II Overview of CGF
- III Status of Small Biz Guarantee Support
- VI Small Biz and ESG Management
- V Major Initiatives in ESG Promotion, Including the Implementation of Green Guarantee

# Overview of KOREG

# I . Overview of KOREG

## 1 Profile of KOREG

 **KOREG** (Korea Federation of Credit Guarantee Foundations) (Since 2000.8)

**“Contribute to the welfare of Small / Micro Biz through Re-guarantee Service for CGFs”**

\* 「Government-affiliated Institution(Nonprofit Special Legal Entity)」 under Regional Credit Guarantee Foundation Act 35

## 2 History of KOREG

- '99.09 「Regional Credit Guarantee Foundation Act 」 enacted
- '00.08 「National Federation of Credit Guarantee Foundations」 established
- '04.01 「Re-guarantee service」 started
- '09.6~'10.7 「Credit guarantee service」 for Individual(2009), 「Sunshine Loan」 Launched(2010)
- '21.12 「ESG」 management committed organized and declared  
\* ESG : 'Environment, Social, Governance'
- '23.6 「Outstanding guarantee」 balance reached **45.9 trillion won(35.8 billion USD)**  
\* Outstanding re-guarantee balance **24.6 trillion won(19.2 billion USD)**

### 3 Main Business of KOREG

- RE-guarantee Service for CGFs
- R&D on methods of Credit Investigations
- Education and Training for executives and employees of CGFs
- Planning Credit Guarantee Scheme, Etc

### 4 Funding Sources of KOREG

- Re-guarantee Fee
- Contributions from Governments & Financial institutions



## Overview of CGF

# II. Overview of CGF

## 1 Profile of CGF

 **CGF** (Credit Guarantee Foundations) (Since 1996)

\* 「Government-affiliated Institution(Nonprofit Public Organization)」 under Regional Credit Guarantee Foundation Act 1

## 2 Business of CGF

 Credit Guarantee mainly focus on Small / Micro Biz

 Credit Investigation

 Credit Information Management

 Business Consulting Service

 Debt Collection

## 3 Funding Sources of CGF

 Contributions from Local governments & Financial institutions

 Guarantee Fees from Small / Micro Biz

## 4 Overview of KOREG, CGF

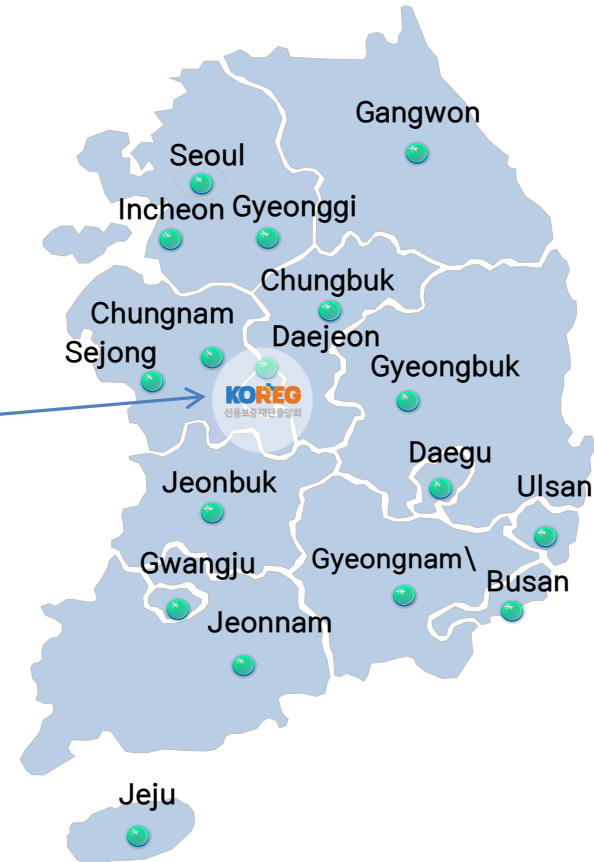
### KOREG

Capital of Re-guarantee 193.2 Million USD  
2 Headquarter in Daejeon, 8 Departments  
1 Division, 1 Office in Seoul, 111 Employees,  
(As of June, 2023)

### 17 CGF

Basic Asset 4,577 Million USD  
17 Head Offices, 194 Branch Office  
1,928 Employees (As of June, 2023)

Headquarter of KOREG  
( Plan Move to Sejong City, 24.Feb)







## Status of Small Biz Guarantee Support

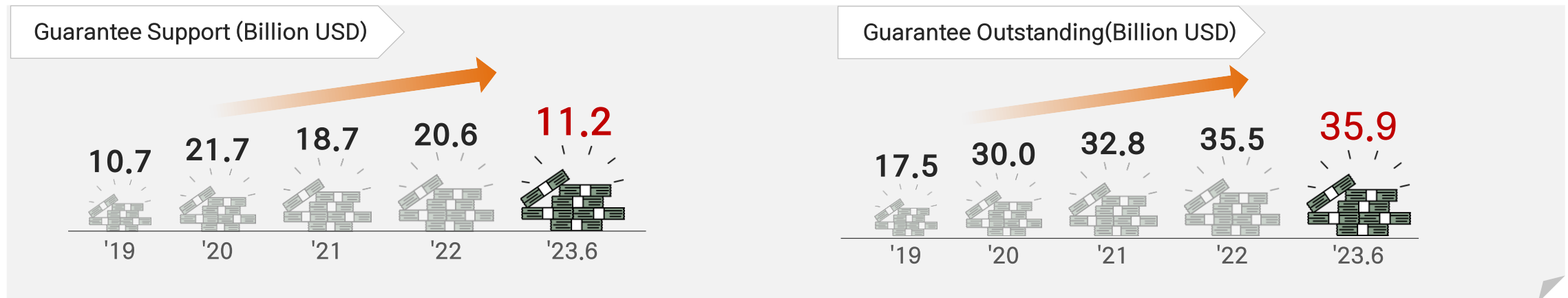
# III. Status of Small Biz Guarantee Support

## 1 Result of Guarantee Support for Small Biz

### Guarantee Scale (Unit : Billion USD)

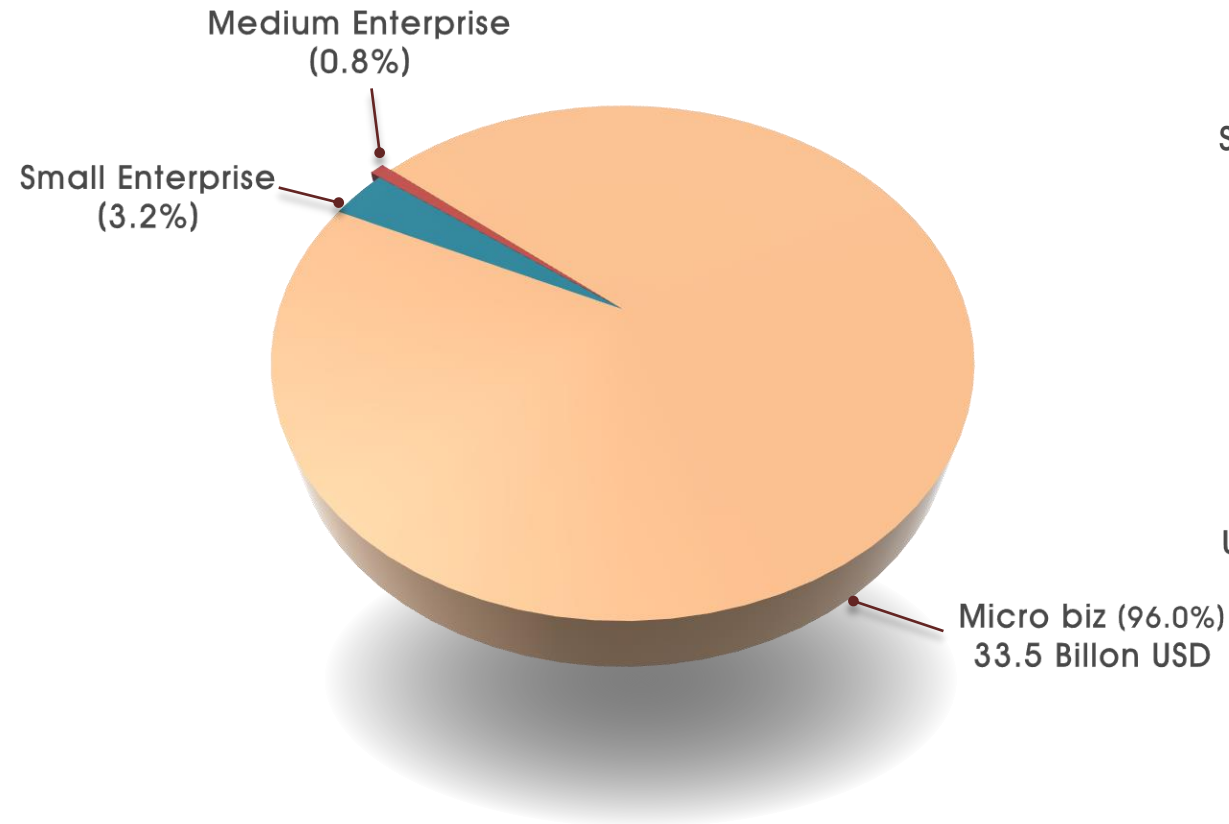
- Since the Establishment of CGF (Before Covid 19) 17.5 ('19) → (After Covid 19) 35.4('22) (twice)
    - During Covid 19, Pure Newly Guarantee Support 18.0 as of '20 (The highest Guarantee Support amount)
- Guarantee outstanding of 30.0(During one year, 2020), compared to '19 (17.5 )
- \* Guarantee Scale ('17) 11.1 → ('19) 16.8 → ('20) 22.9 → ('21) 32.9 → ('22) 36.1 → ('23.6) 35.9

## 2 Trends of Guarantee Support

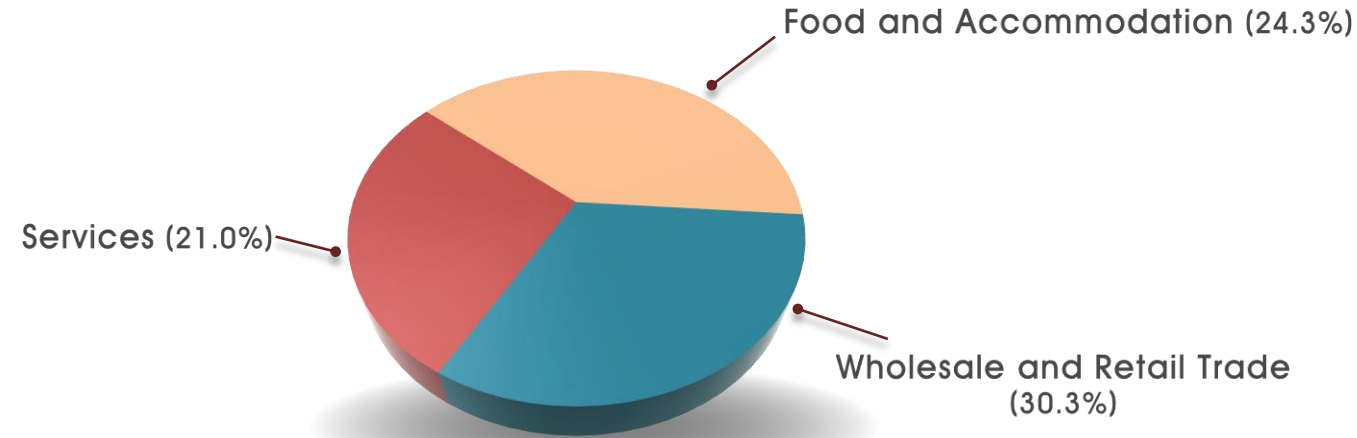


# Result of Guarantee Support for Small Biz

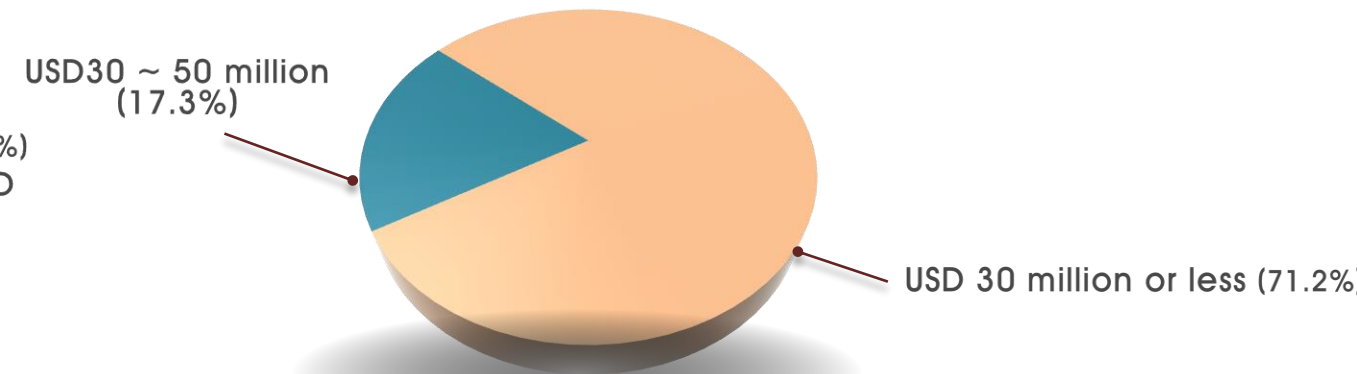
## Scale of Business



## Type of Business



## Guarantee Amount of Business

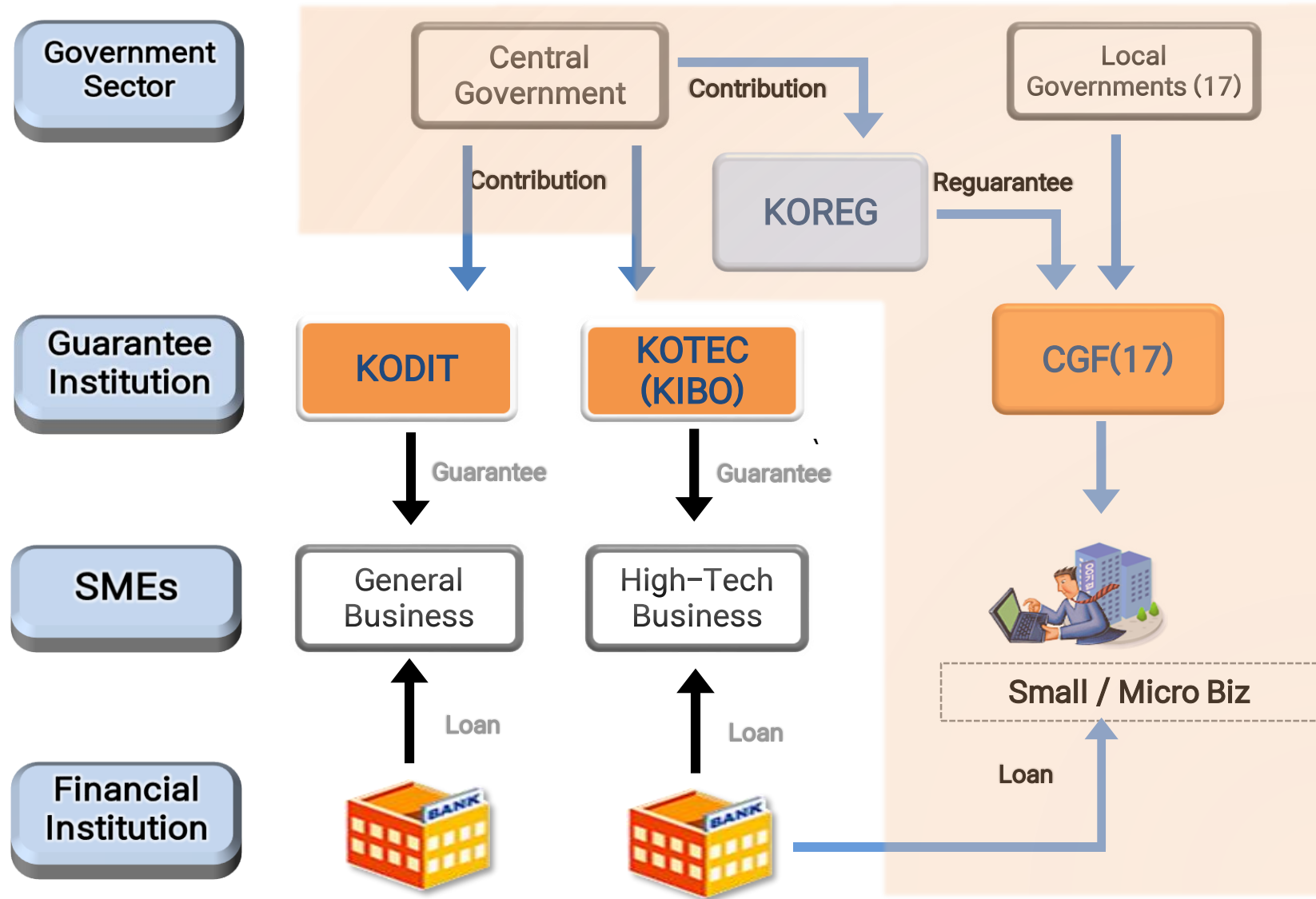


\* Average guarantee amount of CGFs is USD 15,600

### 3 Credit Guarantee Institutions of KOREA

| Category   | Reguarantee                              | Guarantee  |   |   |
|--|--|--|---|---|
|  | KOREG                                    | CGF  | KODIT   | KOTEC(KIBO)                                   |
| Establishment                                    | 2000. August                             | 1996 – 2021  | 1976. June                                    | 1989. April                                   |
| Regal Background                                 | Regional Credit Guarantee Foundation Act | Regional Credit Guarantee Foundation Act             | Korea Credit Guarantee Fund Act               | Korea Technology Credit Guarantee Fund Act    |
| Supervisory authority                            | Ministry of SMEs and Startups (MSS)      | Local Government Ministry of SMEs and Startups (MSS) | Financial Services Commission(FSC)            | Ministry of SMEs and Startups (MSS)           |
| Target Group                                     | 17 CGFs only                             | Small & Micro  | General                                       | Tech-Oriented Venture                         |
| Max Guarantee Amount                             | 400 million KRW (USD 314,425)            | 800 million KRW (USD 628,851)                        | 3,000 million KRW (USD 2,358,193)             | 3,000 million KRW (USD 2,358,193)             |
| Guarantee Outstanding (Amount, as of June, 2023) | 24.6 trillion KRW (USD 19,358 million)   | 45.9 trillion KRW (34.1%, USD 35,889 million)        | 61.4 trillion KRW (45.6%, USD 48,335 million) | 27.3 trillion KRW (20.2%, USD 21,471 million) |
| Guarantee Outstanding (Cases, as of June, 2023)  | 2,279,528                                | 2,256,578 (87.8%)                                    | 227,644 (8.8%)                                | 84,760 (3.4%)                                 |
| Gearing Ratio                                    |  | 7.8  | 8.4   | 8.1   |

## 4 Credit Guarantee / Reguarantee System



## IV Small Biz and ESG Management

# IV. Small Biz and ESG Management

## 1 Companies and ESG Management

### Core Strategies for Business Survival

- If Companies don't aware actively respond to non-financial factors..  
(Such as Environment, Safety, Labor, and Human rights), they may face survival risks.
- Companies' Social issues can lead to boycott movements for Civil Group, NGO  
(Adversely affect consumer decision-making)

### Boycott cases in Korea

- **Company A (Construction)** A fatal accident caused by poor construction  
Leading to a change of apartment construction company and a steady decline in business.
- **Company B (Dairy)** 1 Decade period boycott movements,  
Due to alleged forced sales of products to retailers, CEO Behavior involve in drug-related issues.
- **Company C (Coffee)** A controversy surrounding the political ideology of the subsidiary's CEO (SNS) and expanded to other subsidiaries.

## Responding to Stakeholders' Demands

- **(Consumers Demands)** MZ Generations (at the age of 20~30) pay attention to ESG Values
  - ① The harmlessness (environmental-friendliness) of products
  - ② Corporate ethics, ③ Social responsibility, Ethical Consumption
    - ESG companies are required to interact with MZ Generations (high potential purchasing power)
  
- **(Investor Demands)** Social responsible investment of Corporate investors is rapidly increasing  
Commercial banks also offer benefits based on ESG management.
  - Global investment companies establish responsible investment principles  
(Disqualifications from an ESG perspective)
    - ① Tobacco, ② Alcohol, ③ Gambling, ④ Urging responsible investments



## 2 Requirements of Small Biz ESG Management

### K-Taxsonomy, New Business Opportunities

- (New Business Opportunity in Green Industries)

(Views) ① Consumers attach importance to value-based consumption

② Companies constantly stare at the value consumption market is growing in a virtuous cycle.

- Environmentally friendly businesses are rapidly developing

① Zero-waste stores, ② Investment from local governments, ③ Small Biz in K-Taxsonomy

① Zero-waste store : These are shops that sell products made of biodegradable materials or recycled materials.

② Private Zero Market Activation Support Project : Seoul Metropolitan Government supports businesses with 95 stores that do not use disposable items or plastic packaging to reduce their environmental impact.

These businesses receive up to 8 million won in facility and operational support (as of October 2022).

③ K-Taxsonomy: Based on the "Korean Green Classification System Guidelines" by the Ministry of Environment, which classifies economic activities in terms of their greenness and sustainability

# Classification System of K-Taxonomy

## Green economic activities contributing to six environmental Goals

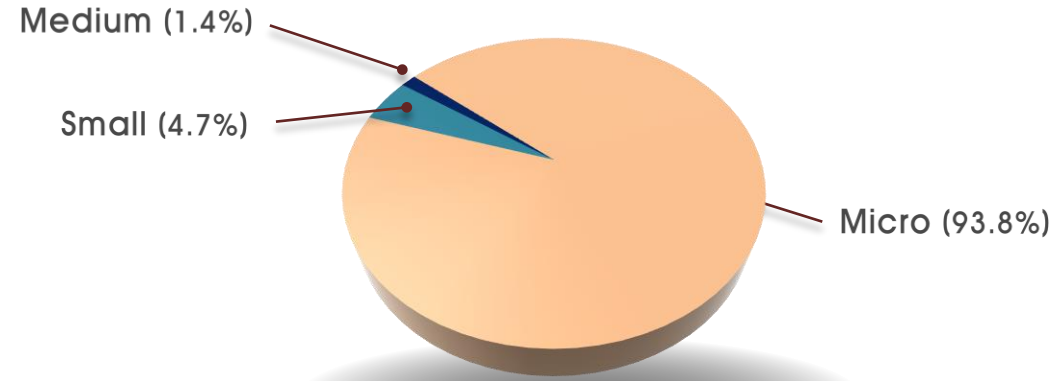
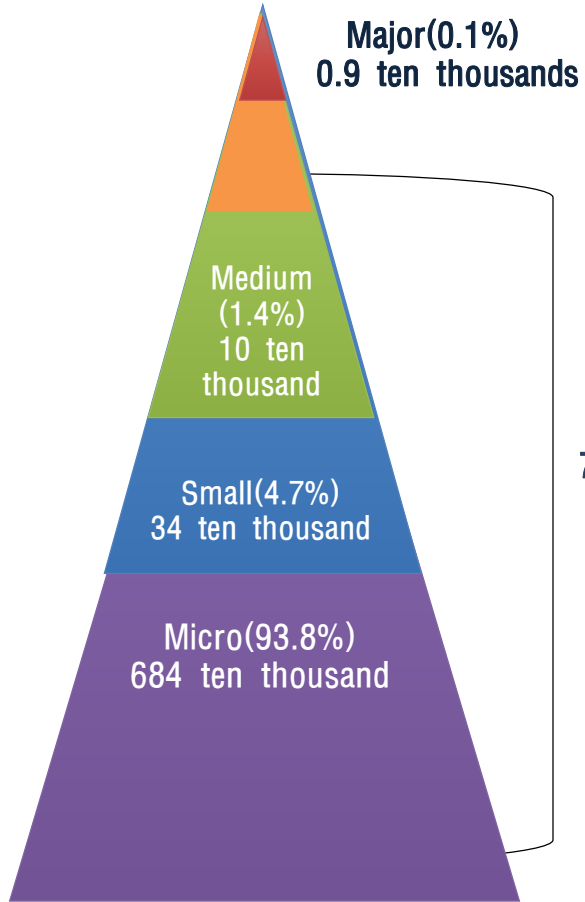
- ① Greenhouse gas reduction
- ② Adaptation to Climate Change
- ③ Sustainable water conservation
- ④ Recycling
- ⑤ Pollution Prevention
- ⑥ Management and Biodiversity

## 87 Economic Activities in 10 Major Fields of South KOREA Green Classification System

1. Forestry: Afforestation, existing forest management, etc. (5 activities)
2. Agriculture and Fisheries: Eco-friendly livestock production, organic farming, etc. (6 activities)
3. Manufacturing: Low-carbon cement manufacturing, green hydrogen production, etc. (9 activities)
4. Energy: Power generation through solar and wind energy, heat production through waste heat, etc. (27 activities)
5. Environment: Air pollution treatment, central wastewater treatment system, etc. (17 activities)
6. Transportation: Freight railway transport, public transportation, low-carbon urban development, etc. (12 activities)
7. Information and Communication Technology (ICT): Low-carbon internet data centers, etc. (3 activities)
8. Construction: New eco-friendly building construction, green remodeling of existing buildings, etc. (4 activities)
9. Nature Conservation: Restoration of natural ecosystems, etc. (2 activities)
10. Specialized Activities and Scientific Technology Development: R&D related to climate change adaptation, etc. (2 activities)

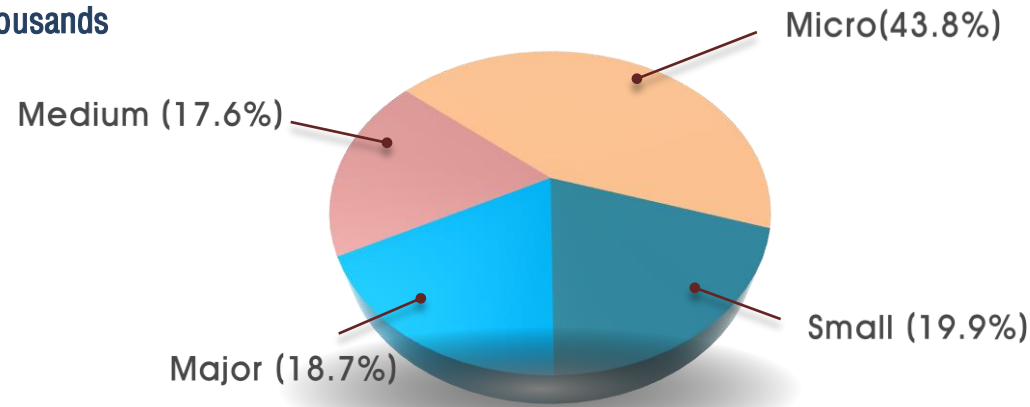
# Roles of making triggers a Change of Consumer Behavior

## Ratio of SMEs



## Number of Enterprise

SMEs(99.9%)  
726 ten thousands



## Number of Employees

- Small Biz can interact with the Open public,  
- Making them effective triggers of changes in consumer behavior for developing to an ESG society.
- \* Micro Biz : 6.84 million(93.8%)

\* Data : 'Report of the census of Establishments'  
- Inspired by Statistics of Korea (2016)

# Process of Disposable Guarantee Cups



**Purchase Beverage  
(Including Disposable Guarantee)**



**After Enjoying Beverage,  
Return to previously purchased store**



**Empty Inner Contents,  
Separate from Remaining Parts**



**Show a barcode of resource circulation app and cup's bar code,  
return the cup, Deposit Receipt Completed**

**V** Major Initiatives in ESG Promotion,  
Including the Implementation of Green Guarantee

# V. Major Initiatives in ESG Promotion (Implementation of Green Guarantee)

## 1 ESG Implementation Framework and Strategy

### Framework

- To comply with the government's ESG policy, Promote sustainable management for Small Biz,  
– KOREG has been established ESG management framework\*

\* ESG Management Committee, ESG Executive Committee, ESG Operations Committee  
(Organizing Groups of Expert Experts, Set the plan and Listen advice on ESG initiatives)

### Organizing Charts



## ESG Implementation Strategy

- **Setting ESG vision and Execution tasks corresponding with founding purpose of KOREG**  
**(ESG Vision) "A financial partner supporting the new leap of SMEs"**

\* Supporting the new leap of SMEs (Entrepreneurial-minded and Competitive Small Biz)

In response to changes in the business environment (Digital transformation, ESG dissemination, Social responsibility)

- **Tasks for Small Biz to spread ESG**
  - ① Internal execution tasks for ESG within KOREG
  - ② Through major projects of CGFs and KOREG, Execute tasks for spreading ESG for Small Biz
    - \* **Activating ESG guarantee products and Inducing responsible management**
    - **Support of the spread of ESG for Small Biz**

## 2 Implementation tasks for Small Biz to Spread ESG

- Activating ESG guarantee products and Inducing responsible management
  - Support of the spread of ESG for Small Biz
- (CGFs & KOREG) To promote understanding of ESG values among CGFs
  - 4 CGFs are currently providing Special guarantees including preferential guarantees
  - KOREG will soon launch on “Green Support Special Guarantee”, (second half of 23)

\* Daejeon, Daegu, Seoul, Chung-nam, Jeonnam, Incheon,

### CGFs that providing Special Guarantee for ESG





# Environmental Guarantee

| Category                       | KOREG(preparing)                                   | Seoul   | Daegu                   | Chungnam  | Daejeon  |
|--------------------------------|--|---|-------------------------|---|--|
| Guarantee Target               | Green Certified Co<br>Taxonomy Co.<br>(K-Taxonomy) | Eco-Friendly Company<br>Job Creating Company<br>Company with Dedicated<br>ESG Departments | ESG Practice<br>Company | Green Industry Co.<br>Green Management Co<br>Carbon-Neutral Practice<br>Social Responsibility<br>Practice | Green Industry Co.<br>Green Management Co.<br>Carbon-Neutral Practice Co.<br>Social Responsibility Practice<br>Co. |
| Guarantee Limit                | USD 78,000   | USD 152,000   | USD 152,000             | USD 3,800   | USD 38,000   |
| Guarantee Period               | 5 years  | 5 years   | 5 years                 | 7 years   | 1 year   |
| Guarantee Ratio                | 95%  | 95%   | 90~100%                 | 90~100%   | 85~100%  |
| Implementation<br>Period       | '19.10~ Now  | '19.10~Now  | '23.1~Now               | '22.1~Now   | '22.9~Now  |
| Performance<br>(As of June.23) | -  | USD 103 million   | USD 18 million          | USD 3.6 million   | USD 2.6 million  |

# Green Guarantee Support Eligibility (Detailed Information)

| Eligibility                              | Details  |
|--|--|
| Green Industry Companies                 | Green Certification Companies, Green Technology, Green Product Certification   |
| Green Management Companies               | Companies certified by the Korean Standards Association as "Green Management System (GMS) Certified Companies."  |
| Carbon Neutral Practice Companies        | Transport operators who have implemented exhaust gas reduction devices or use low-pollution vehicles.  |
| Social Responsibility Practice Companies | Companies that have maintained employment without layoffs for the past year.<br>Companies employing people with disabilities.<br>Companies fulfilling social responsibilities through volunteer activities, blood donations, etc.  |
| ESG Practice Companies                   | Companies practicing ESG management, including those with ISO certification related to environmental and energy management systems.<br>Social economy companies including social enterprises, community enterprises, cooperative associations, etc.  |
| Taxsonomy Companies                      | K-Taxonomy (Korean Green Classification System) Industries for Companies Engaged in Each Sector: <ul style="list-style-type: none"> <li>• <b>Industries associated with the 10 sectors and 87 economic activities.</b> <ul style="list-style-type: none"> <li>- <b>Forestry-related Services (including subcategories)</b></li> <li>  <b>Coal, Oil, and Natural Gas Mining (including subcategories)</b></li> <li>  <b>Metal Mining (including subcategories)</b></li> <li>  <b>Non-Metallic Mineral Mining: Excluding Fuel (including subcategories)</b></li> <li>  <b>Chemicals and Chemical Products Manufacturing: Excluding Pharmaceuticals (including subcategories)</b></li> <li>  <b>ETCs</b></li> </ul> </li> </ul> |

# Social Guarantee

- **(CGFs & KOREG)** To support for Socially Vulnerable Groups (Disabled and Low-Credit Consumers)
  - Special Guarantee Support (Social Economy Enterprises, the Disabled)
  - Bridge Guarantee, Special Guarantee for Re-Startup

| Special Guarantee           | Social Economy Enterprise   | The Disabled   | Bridge  | Re-Startup   |
|-----------------------------|---|--|---|--|
| Guarantee Target            | Social Enterprise, Co.<br>Village Co.<br>Self-Reliant Co.<br>Consumer Co. | A disabled-owned business that has registered as a legal entity and is currently operating | <ul style="list-style-type: none"> <li>– Small Bizs who are out of business using KOREG's guarantee</li> <li>– Small Bizs have a CEO's credit score of 990 or less or annual income of 62,600 USD or fewer</li> </ul> | <ul style="list-style-type: none"> <li>– Small Biz that have registered as legal entities</li> <li>– Small Biz are currently operating after reopening following closure or changing their industry</li> </ul> |
| Guarantee Limit             | USD 304,000   | USD 76,100   | within the previous guarantee balance   | USD 76,100   |
| Guarantee Period            | 5 year  | 7 year   | 5 year  | 5 year   |
| Guarantee Ratio             | 100%  | 100%   | 100%  | 100%   |
| Performance (As of June.23) | USD 65.1 million  | USD 34.2 million   | USD 307.2 million   | USD 49.2 million   |

# Governance : Transparent Management

- "Exemption of Joint Guarantees for Corporate Enterprises" (implemented in April 2018)
  - To promote a healthy entrepreneurial ecosystem and job creation
  - As part of preventing Ethical violations in companies eligible for this exemption, The "Responsible Management Evaluation System" was introduced.

CGFs evaluate cases of any violations of transparent management among Companies

- If those\* are confirmed, companies found in violation are not eligible for guarantees.

\* Misappropriation, embezzlement, or non-payment of wages, is considered

\* Example of Responsible Management Evaluation: no cases of misappropriation,

- ① Embezzlement, or non-payment of wages causing social concerns in relation to corporate management.
- ② No registered instances of irregular financial information  
(such as fabrication, submission of false data, or loan fraud) that disrupts financial order)

### 3 Establishing a Paperless Environment for Guarantee Operations

#### Digital Transformation of Administrative Documents through Introduction of Public My Data

- (Purpose)** ① Minimize the submission of administrative documents by using public my data  
Complete digitalization of customer preparation
- ② Submission documents through the establishment with App and Digital Channel

- Receiving up to **34 types of administrative documents** required for guarantee inspection
  - **Bulks from the government and public institutions**, managing them in a database, and utilizing them in business operations.
  - **Small Biz can benefit from increased convenience through automatically input functions.**
  - **Automation and Improved data** management through database utilization are expected to enhance the efficiency of the data

## Changes of the Introduction of Public MyData

| Category  | As is  | To Be   |
|-----------|--|---|
| Small Biz | (Direct Submission)<br>Visiting administrative institutions for document issuance, submission.                   | Submitting a request for the provision of public my data (once) |
|           | (Online Submission)<br>Visiting local government offices for consent form submission through an online platform. |   |
| CGFs      | Receive documents (or output individually from the network) input key data directly from the customer            | Automated Data Collection, Input for Transmission.              |

## Updated Information

| Item   | Company Name   | Establish Date | Business Address  | Representative | Representative Address                             | Revenue   | Number of Employees   | Financial Statement | Balance Sheet |
|--------|--|----------------|---|----------------|--|---|---|---------------------|---------------|
| Source | National Tax Service (Business Registration Certificate) |                | Ministry of the Interior and Safety (Resident Registration Certificate) |                | National Tax Service (Value Added Tax Certificate) | National Pension Service (Certificate of Insurance Premium Payment) | National Tax Service (Standard Financial Statement Certificate) |                     |               |

## Improvement of Non face-to-face Guarantee Document Request Method with App

- Customer documents will be created as electronically signed documents with legal validity.
  - While Submitted documents will be transformed into an electronic request method using features like image capture.

\* TSA (Timestamp Authority) to ensure authenticity, while submitted documents will be minimized using Public MyData.

## Implementation of Digital Counters to Promote the Digitalization of Customer Documents

- Customers who cannot visit the branch, use the app (elderly individuals or mobile phones)
  - Touch monitors and electronic forms will be utilized to create electronic documents.

\* Key documents like contracts and consent form will have Time Stamping Authority (TSA) applied

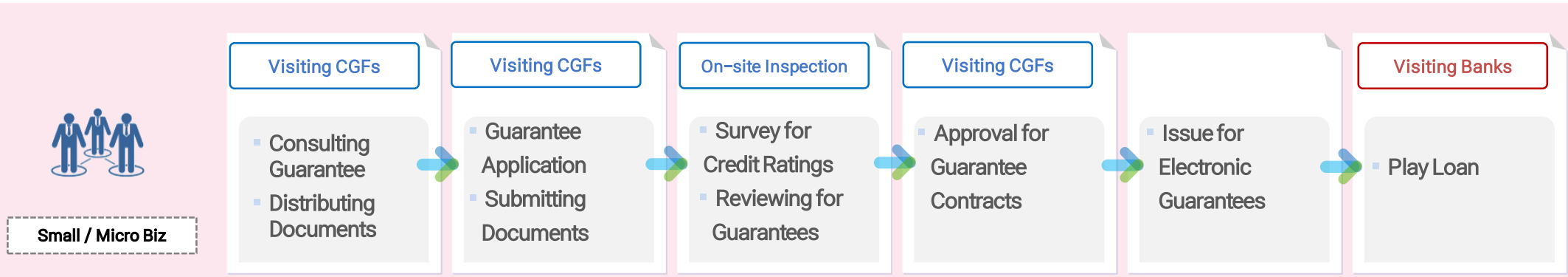
- Public MyData will be utilized to minimize document submissions(necessary documents)

\* a dedicated scanner (for identification cards, seals, and documents) will be used to digitize them

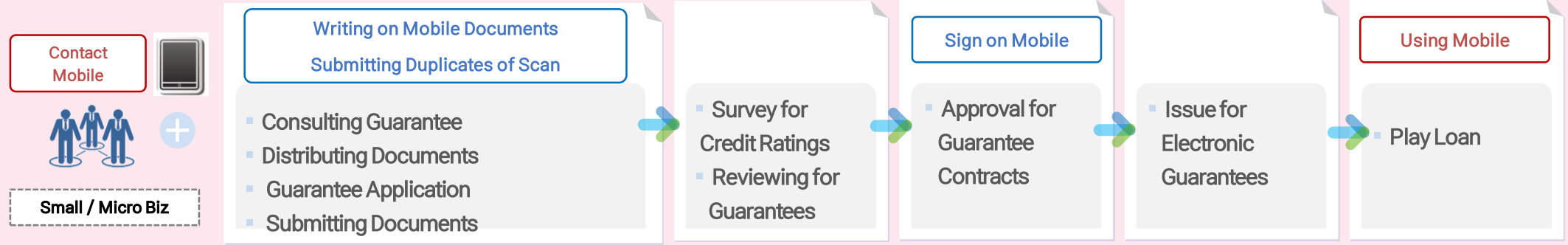
# Non Face to Face Guarantee System

- Without visiting CGFs & Banks,  
Small & Micro Biz can handle **All processes of Guarantee, Loan using Application in Mobile.**

Before



After



All Guarantee Processes are possibly taken by No-Visit



# Measures for Creating a Paperless Environment

| Category        |                  | Writing Document (Original Required)  | Submission documents (Copy Allowed)  |
|-----------------|------------------|---|--|
|                 |                  | Consent Forms, Agreements, etc.   | Administrative Documents, Identification Cards, Lease Agreements, etc.   |
| IN-Person       |                  | Digital Counter (Keypad) Entry<br>→ Image System Registration<br>Electronic doc. Management(EUM) Storage          | Storage and Upload via Administrative Shared Network<br>· Query and Image Processing of Public MyData<br>· Scanning and Returning for Direct Submissions |
| NFC             | APP              | Transmitting in File Format → Registering in the Image System<br>Storing in Electronic Document Management (EUM). |  |
|                 | Guarantee Amount | Creating in the App →<br>Registering in the Image System Storing in Electronic Document Management (EUM).         | Requesting through the App → Registering in the Image System and Storing in Electronic Document Management (EUM)   |
| Common Criteria |                  | -   | Querying and Image Processing of Public MyData.  |

# Your Eternal Guarantee Partner

In realizing your dreams,  
CGFs & KOREG will promise We could be a reliable supporter of Small / Micro biz

## Thank You !



**KOREG**

# EXPERT INSIGHT DISCUSSION 2

## Asia in the Global Transition to Net-Zero: Asian Development Outlook 2023 Thematic Report





# ASIA IN THE GLOBAL TRANSITION TO NET ZERO

Thematic Report of the  
Asian Development Outlook 2023

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Shu Tian (Asian Development Bank)

ACSIC Conference Mongolia  
August 2023



ADB

# Background

- **The Paris Agreement** achieved a global consensus to keep global warming well below 2°C relative to preindustrial temperatures.
  - Nearly all countries of the world submitted nationally determined contributions (NDCs) with emissions reduction targets.
  - However, those targets collectively fall well short of the goals of the Agreement.
- During 2020-2022 many countries put forward much more ambitious **net zero pledges**, and the importance of net zero received much more global recognition.
- **Technologies and policies** have also evolved over recent years, with rapid declines in the cost of renewables.
- Merits exploration of what a **net zero world** would mean for **developing Asia**, the main source of recent emissions increases.

# Outline of the Thematic Report

1. Asia's Special Stake in the Global Climate Crisis

2. Asia's Transformation during the Global Transition to Net Zero

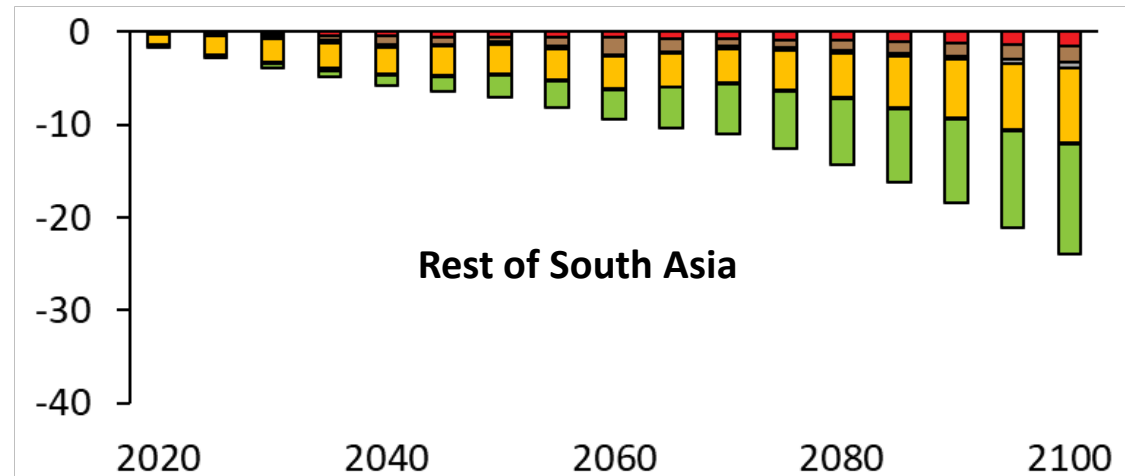
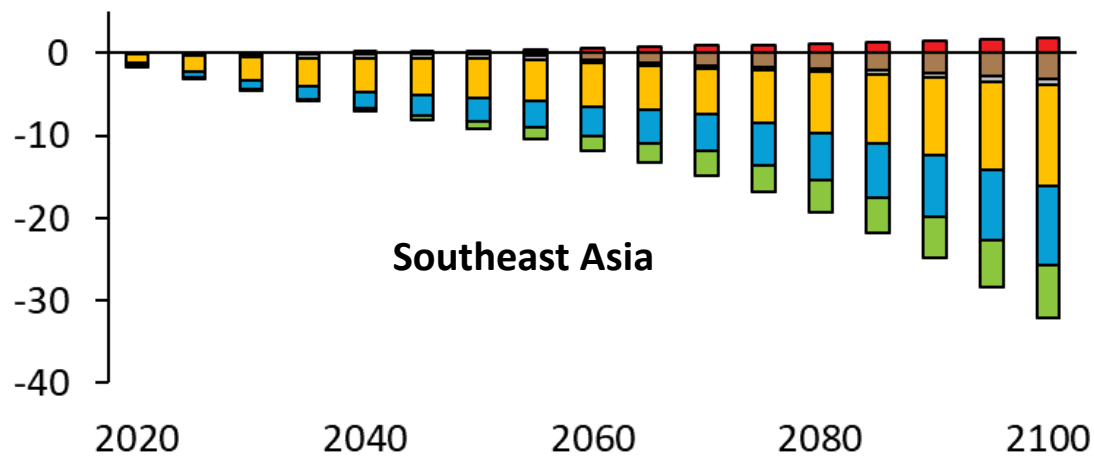
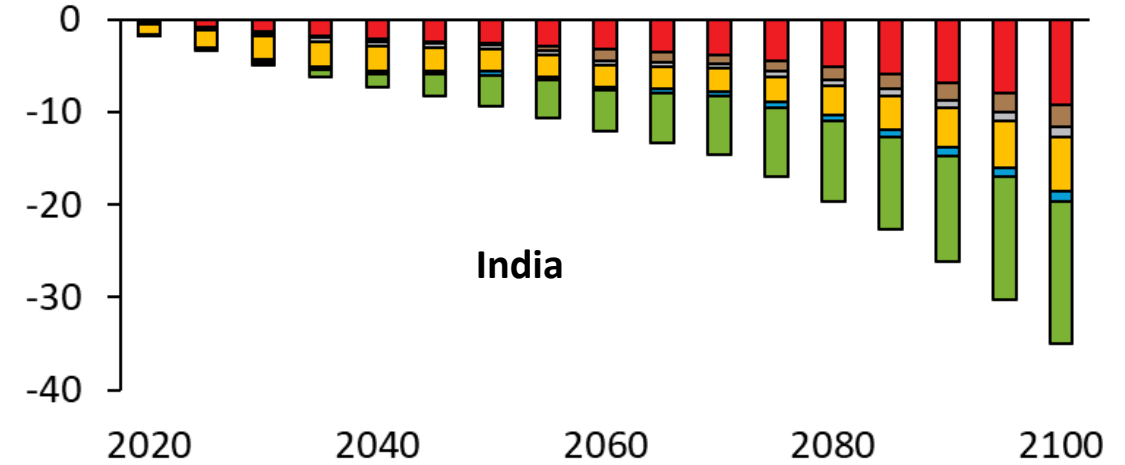
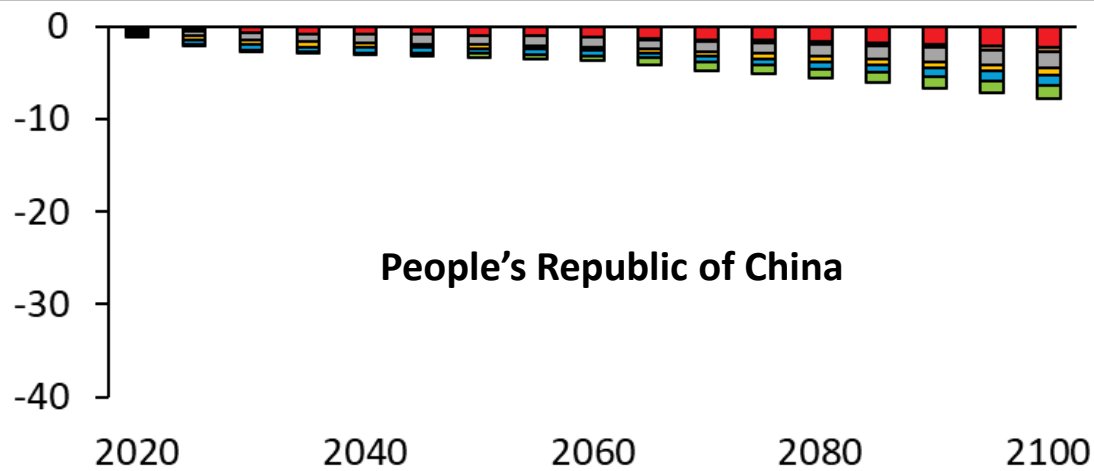
3. Socioeconomic Consequences of the Global Transition Net Zero

4. Policies for an Efficient and Equitable Global Transition to Net Zero

# Asia's Special Stake in the Global Climate Crisis

# Developing Asia will face large losses, if climate change is not addressed

## Economic Losses from Climate Change in Developing Asia under a High Emissions Scenario by 2100 (% Change in GDP)



■ Energy and transport   
 ■ Forestry   
 ■ Labor productivity   
 ■ Riverine flooding   
 ■ Sea level rise   
 ■ Agriculture

GDP = gross domestic product.

Source: Author's calculations from K. van der Wijst et al. 2023. [New Damage Curves and Multi-Model Analysis Suggest Lower Optimal Temperature](#). *Nature Climate Change*.

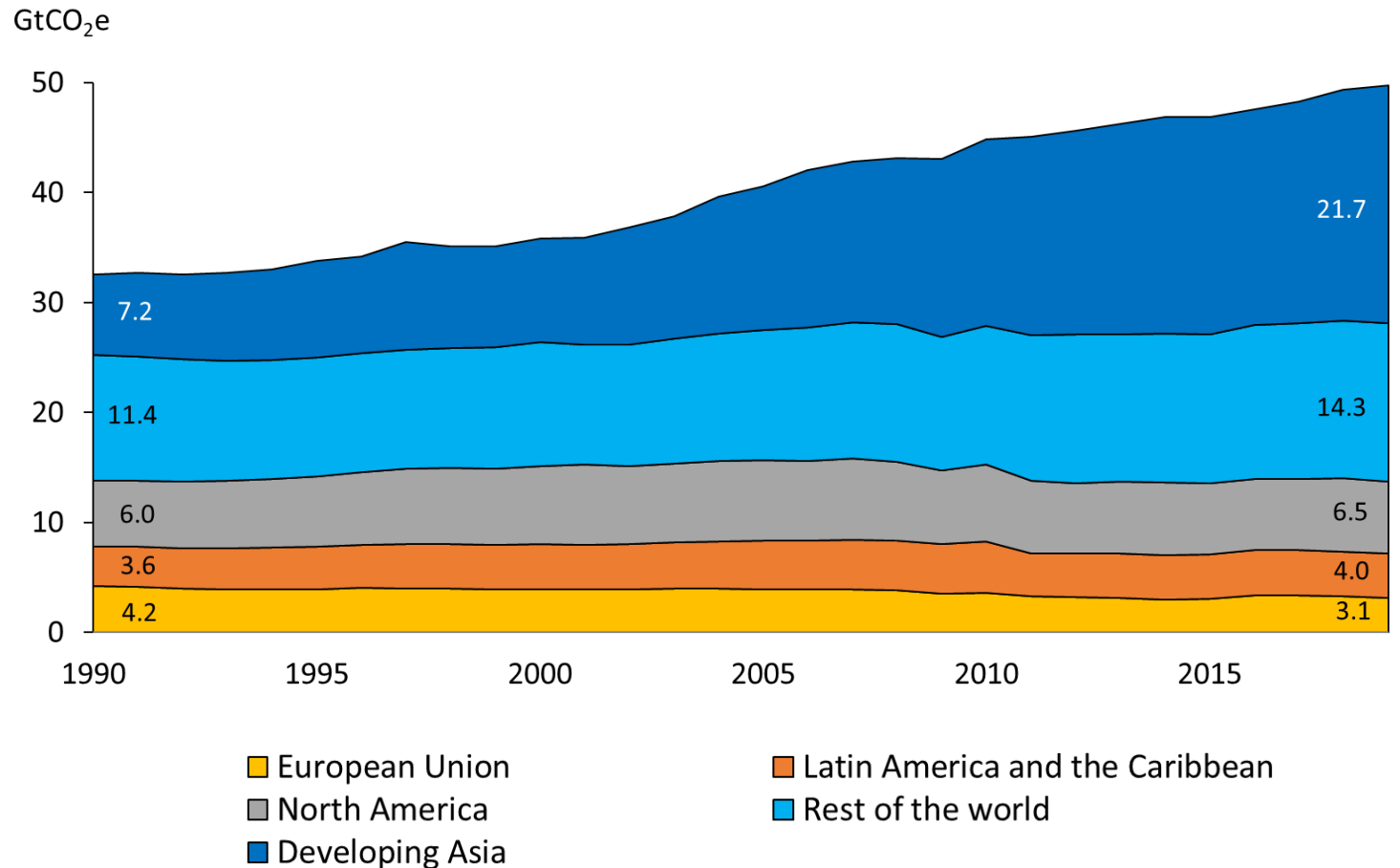




# Climate change cannot be addressed without Asia

- The region is increasingly a **contributor to the global climate crisis**.
- However, signs of change:
  - All developing Asian parties to the Paris Agreement have submitted **nationally determined contributions (NDCs)**.
  - The region's largest emitters have made **net-zero pledges**, representing close to 80% of the region's emissions in 2019.

Global Annual Greenhouse Gas Emissions, 1990–2019

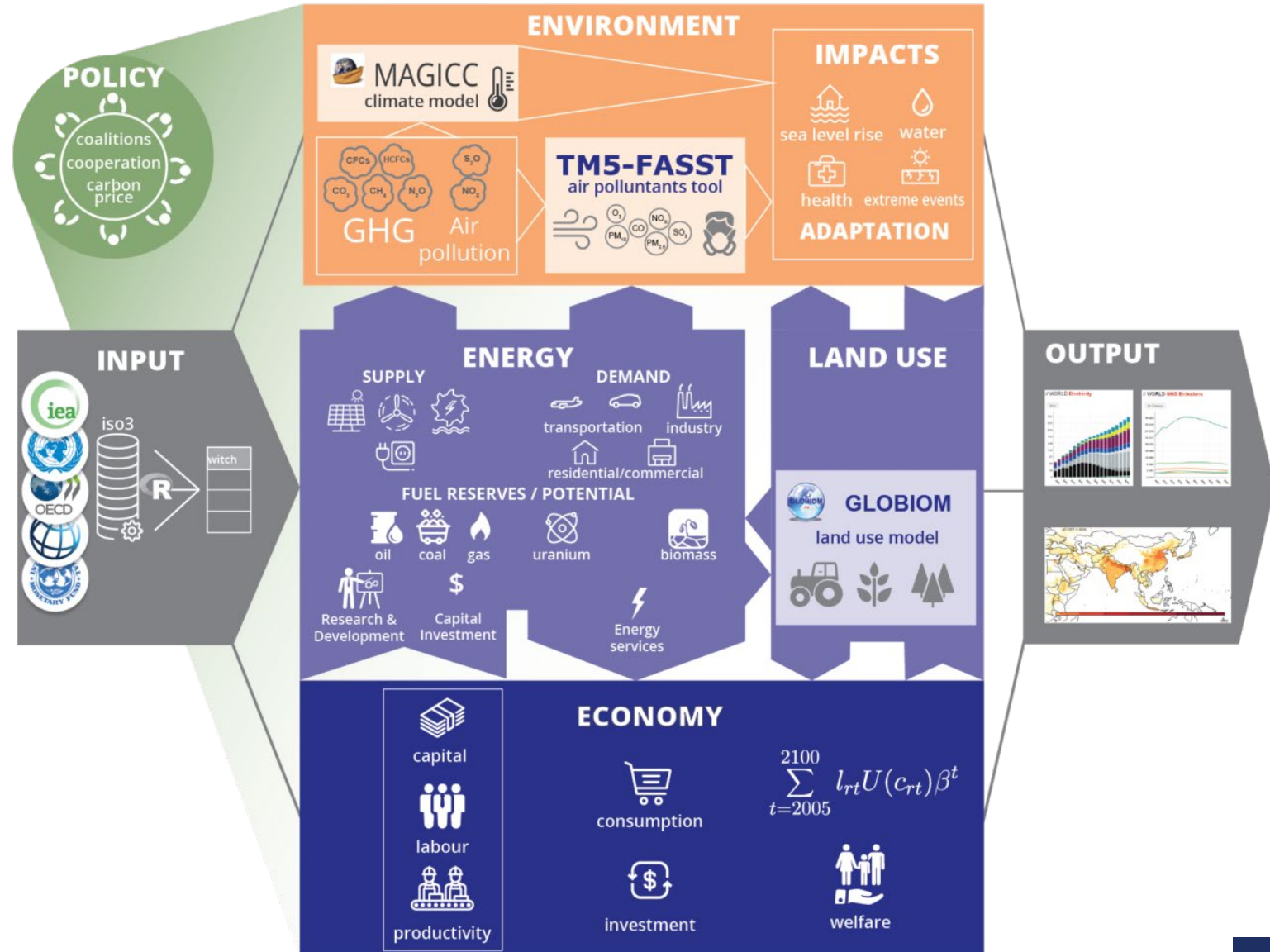


GtCO<sub>2</sub>e = billion tons of carbon dioxide equivalent.  
Source: World Resources Institute. [Climate Watch](#).

# Asia's Transformation during the Global Transition to Net Zero

# World Induced Technical Change Hybrid (WITCH) model

- **Third most used** integrated assessment model for Intergovernmental Panel on Climate Change 6<sup>th</sup> Assessment Report
- Macro-economic model linked to **energy model** including specific technologies.
- Incorporates **technical change** via learning by doing and research.
- Soft linked to **land use** model (GLOBIOM)
- Results fed to **climate, air quality, microsimulation, and labor** models



# Scenario framework

## Climate Scenario Matrix

| Scenario                    | NDCs<br>Until 2030 | 2030 to Net<br>Zero Year | International<br>Carbon trade | Carbon<br>Emissions<br>2020-2100        |
|-----------------------------|--------------------|--------------------------|-------------------------------|---|
| Current policies            | No                 | Current policies         | No                            | 3,270 GtCO <sub>2</sub><br>(endogenous) |
| NDC effort                  | Unconditional      | NDCs<br>Extrapolation    | No                            | 2,650 GtCO <sub>2</sub><br>(endogenous) |
| Uncoordinated net zero      | Unconditional      | Pledged<br>transition    | No                            | 1,420 GtCO <sub>2</sub><br>(endogenous) |
| Global net zero             | Unconditional      | Fast transition          | Yes                           | 1,150 GtCO <sub>2</sub>                 |
| Accelerated global net zero | Beyond NDCs        | Fast transition          | Yes                           | 1,150 GtCO <sub>2</sub>                 |

Scenarios under current bottom-up approach of the Paris Agreement

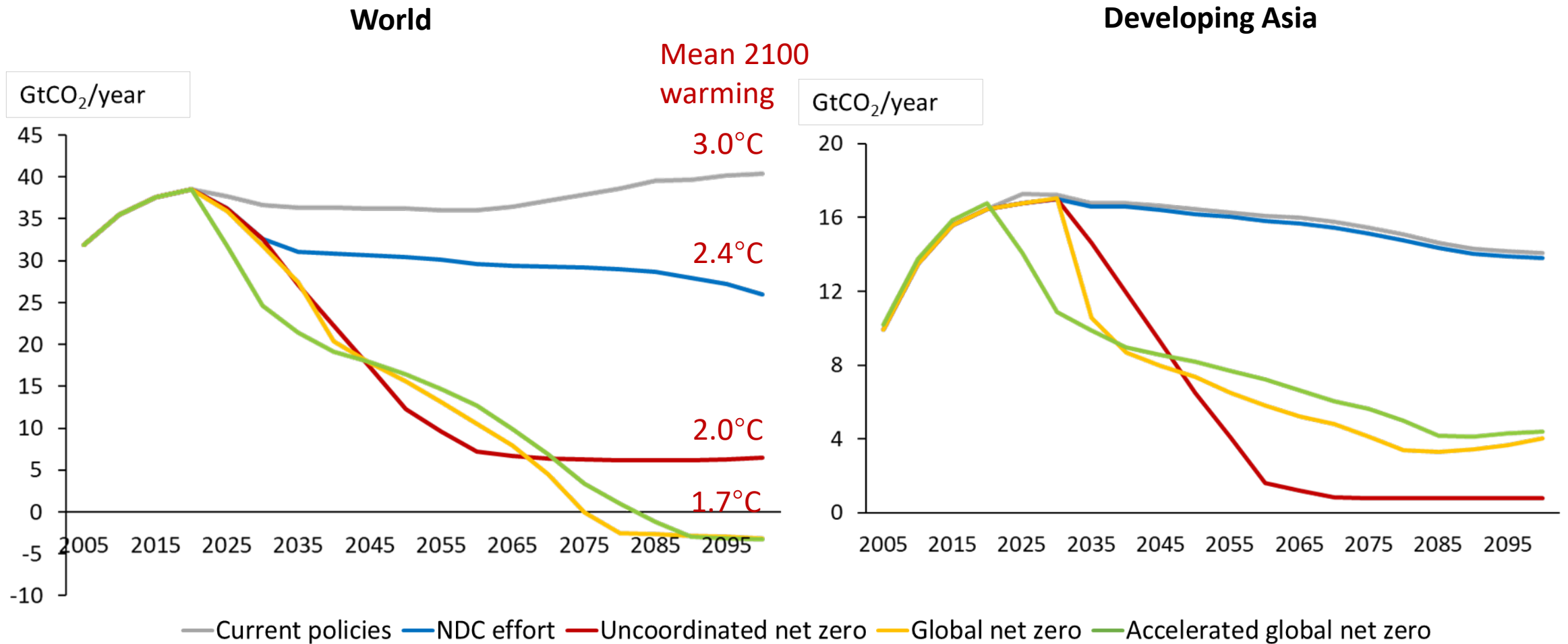
Scenarios that meet Paris Agreement goals through greater coordination (>66% probability of less than 2°C of peak warming)

GtCO<sub>2</sub> = billion tons of carbon dioxide, NDC = nationally determined contribution.  
Source: Authors.

Disaggregation within developing Asia: Caucasus and Central Asia, People's Republic of China, India, Rest of South Asia, Indonesia, Rest of Southeast Asia

# Scenarios contrast current policies, NDCs, and national net zero pledges with more optimal net zero pathways.

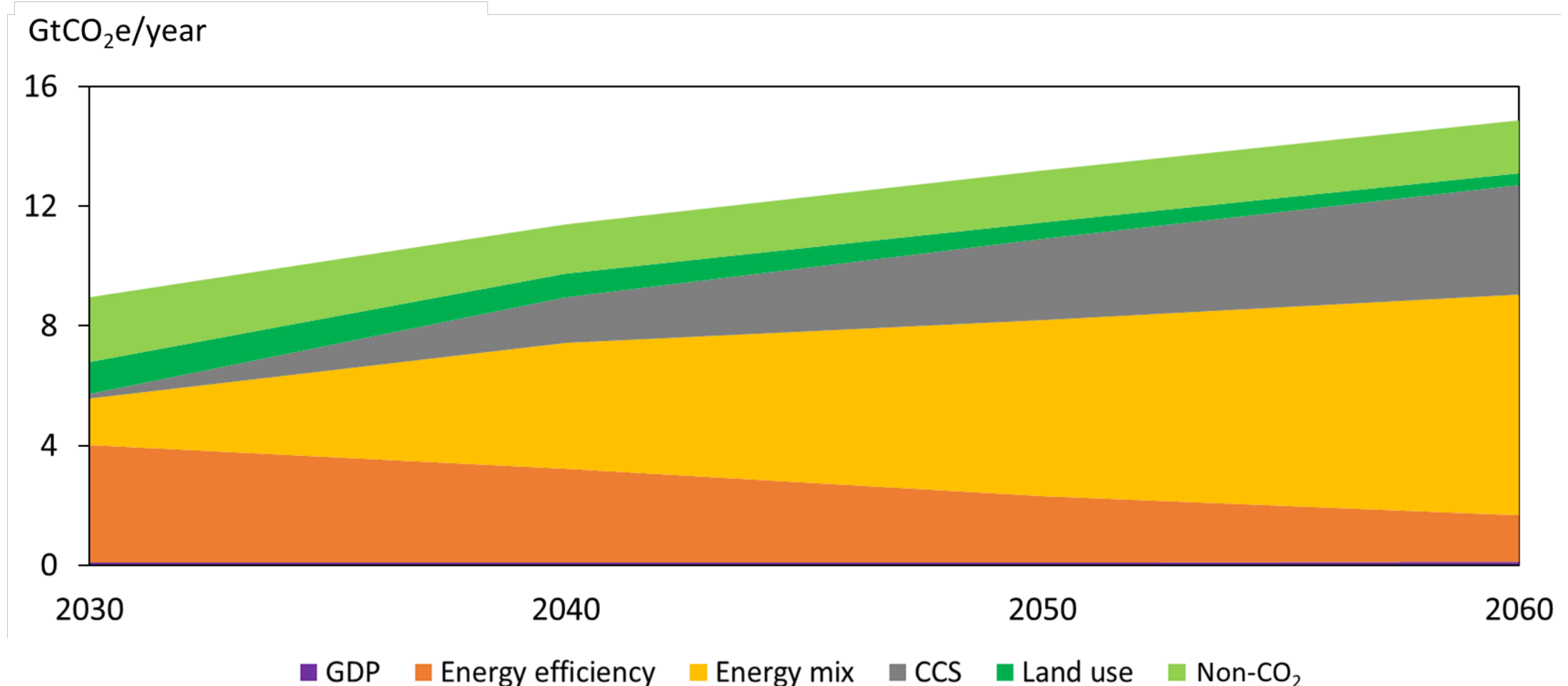
## Carbon Dioxide Emissions Pathways under the Modeled Scenarios, 2005–2100



GtCO<sub>2</sub>/year = billion tons of carbon dioxide per year, NDC = nationally determined contribution  
 Notes: International shipping and aviation emissions are not included in the global CO<sub>2</sub> emission pathways.  
 Source: Authors.

# Energy efficiency and land use abatement will dominate mitigation in the near term, while decarbonization of energy is critical in the long run

Decomposition of Mitigation Sources in Developing Asia under the Accelerated Global Net Zero Scenario, 2030–2060

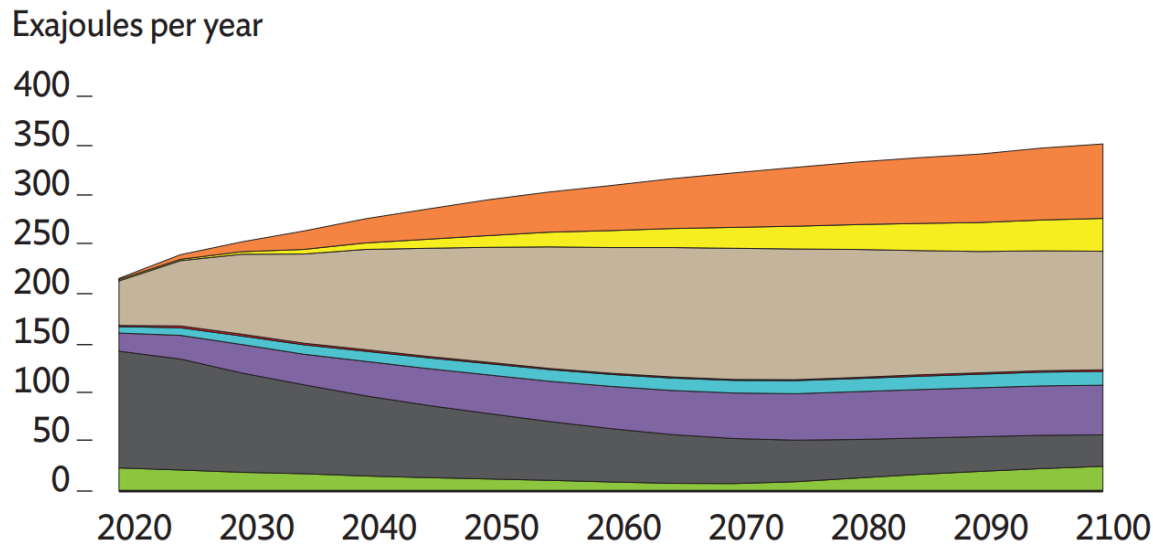


CCS = carbon capture and storage, CO<sub>2</sub> = carbon dioxide, GDP = gross domestic product, GtCO<sub>2</sub>e/year = billion tons of carbon dioxide equivalent per year. Source: Authors.

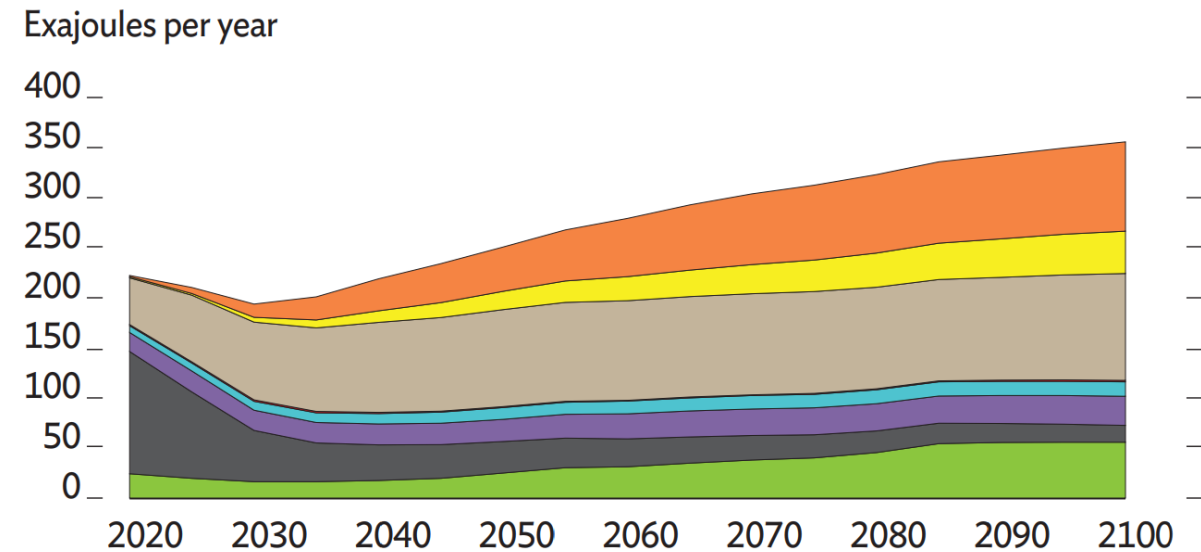
# As the largest source of emissions, the energy sector will undergo a rapid transformation

## Primary Energy Mix in Developing Asia under Modeled Scenarios, 2020–2100

### Current Policies



### Accelerated Global Net Zero

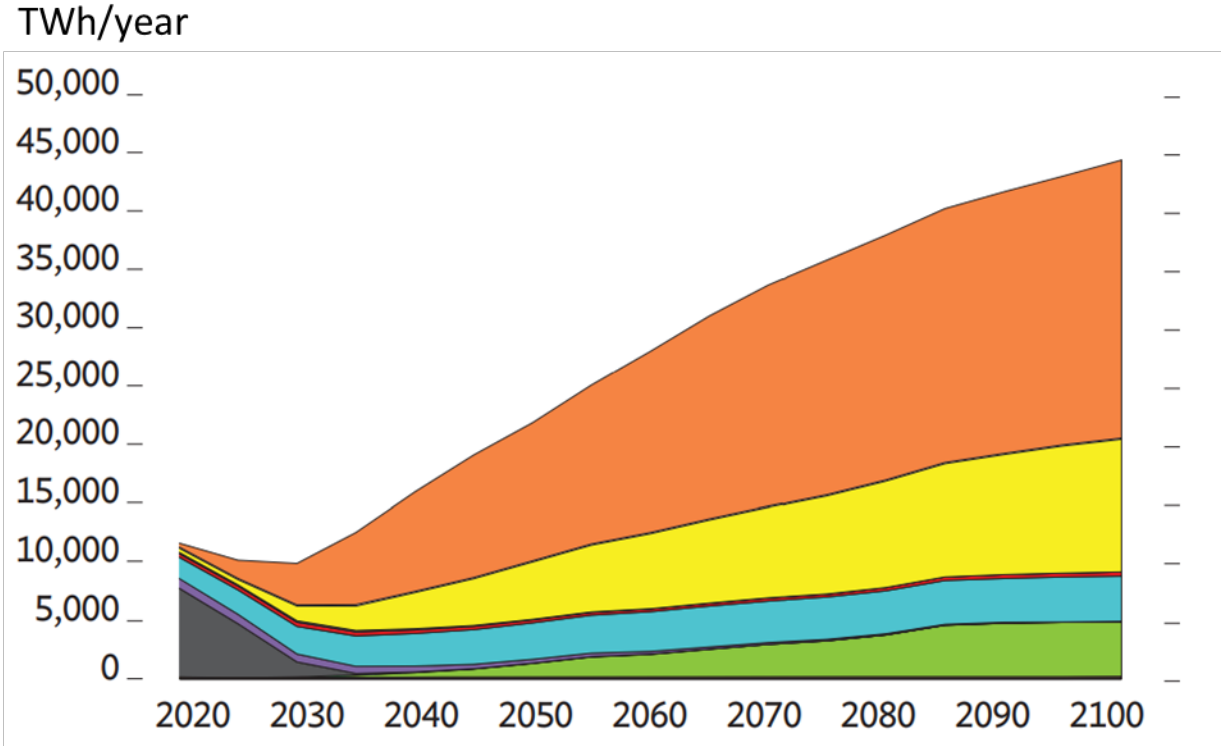
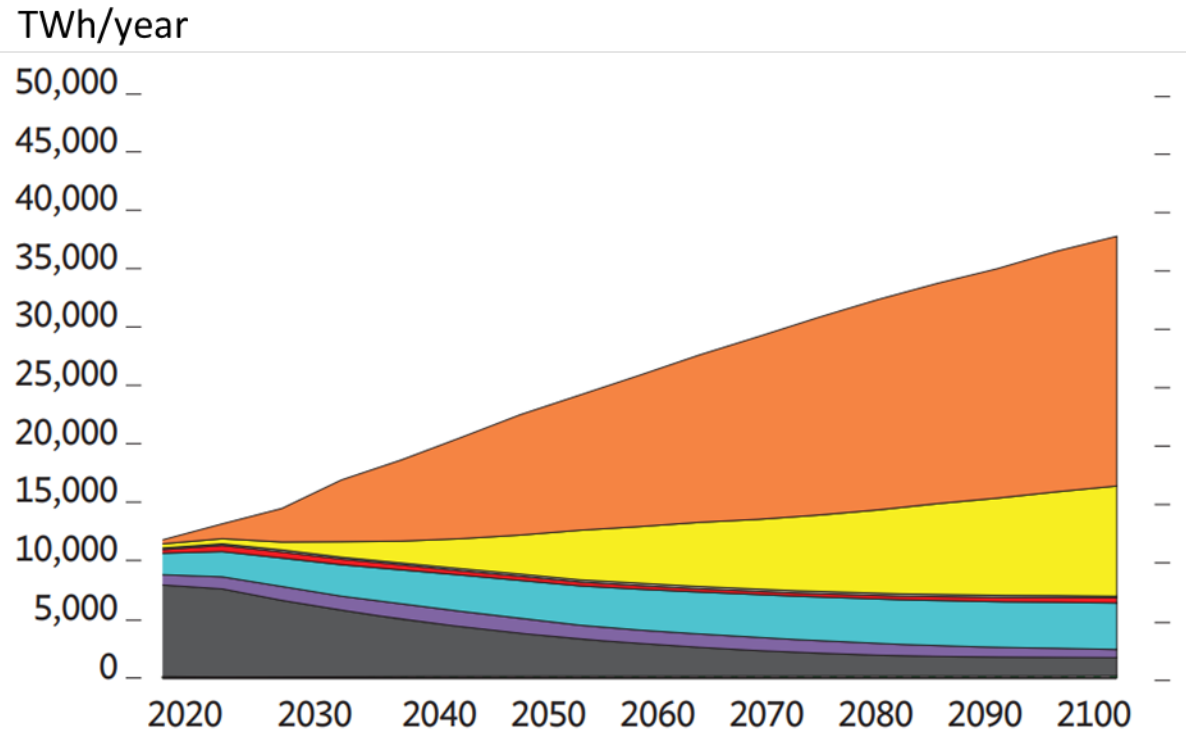


# Electricity sector will undergo faster decarbonization under the net zero scenarios, with coal virtually absent.

## Electricity Mix in Developing Asia under Modeled Scenarios, 2020–2100

### Current Policies

### Accelerated Global Net Zero



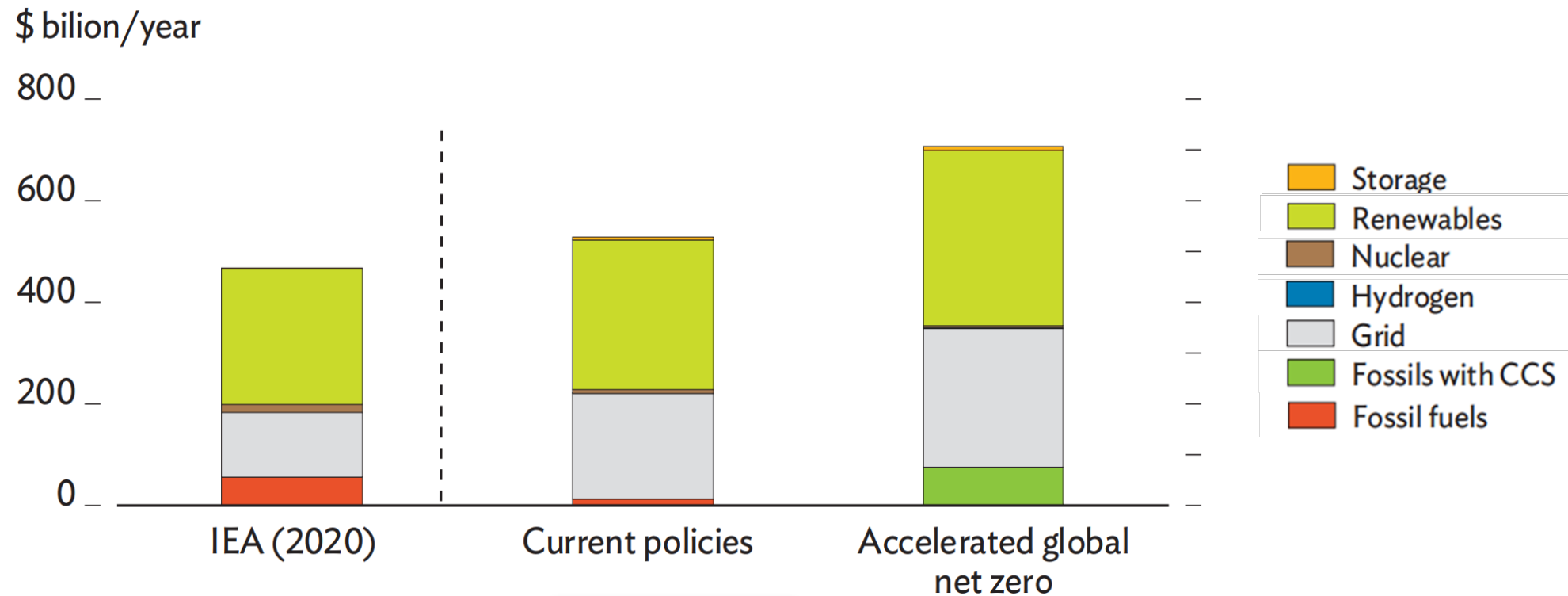
- Biomass with CCS
- Biomass without CCS
- Coal
- Gas
- Hydro
- Nuclear
- Oil
- Solar
- Wind

CCS = carbon capture and storage, TWh = terawatt-hour.  
Source: Authors



# The energy transition requires an increase in total investments in power supply.

**Average Annual Investment in Power Supply in Developing Asia under Modeled Scenarios, 2020–2050**



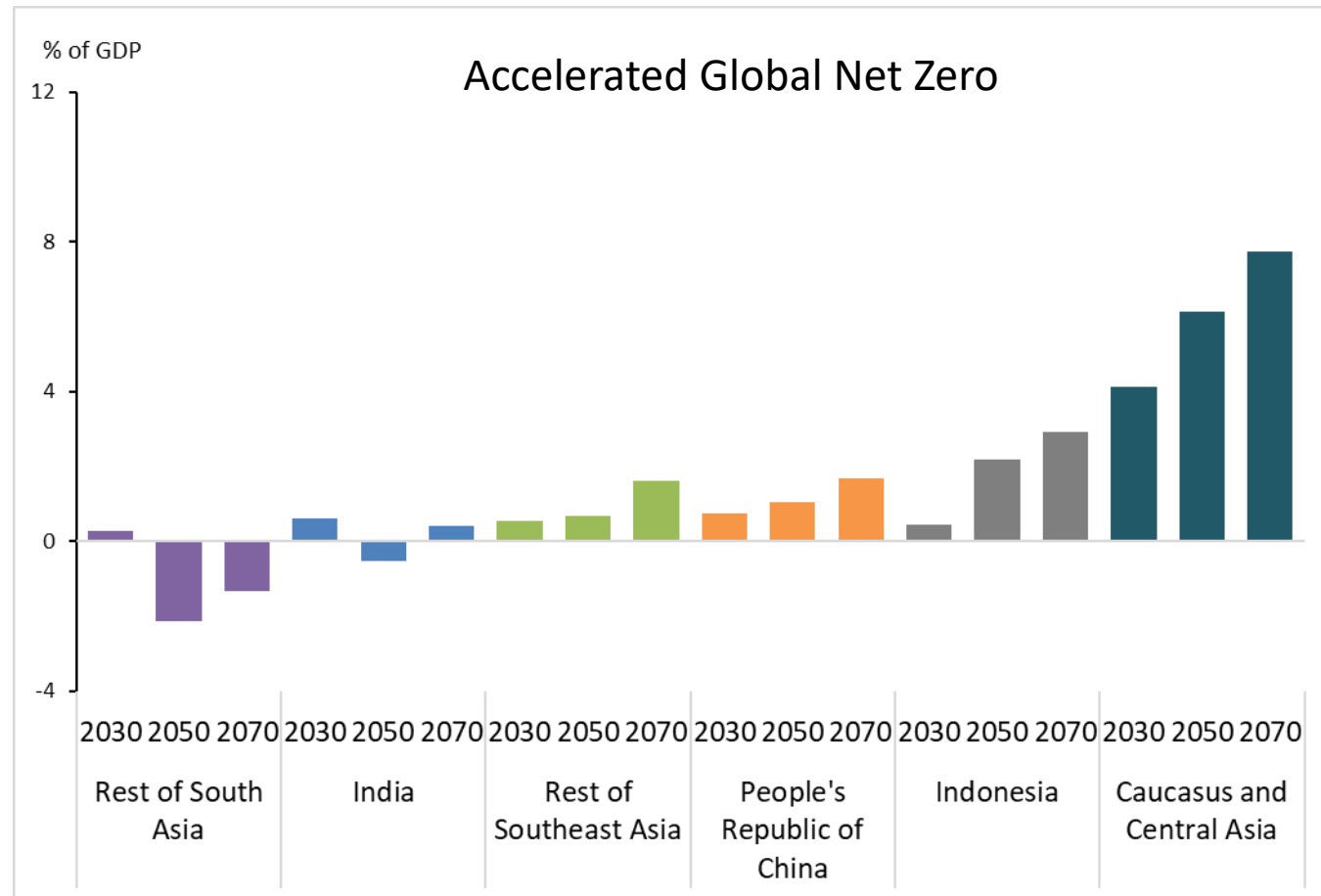
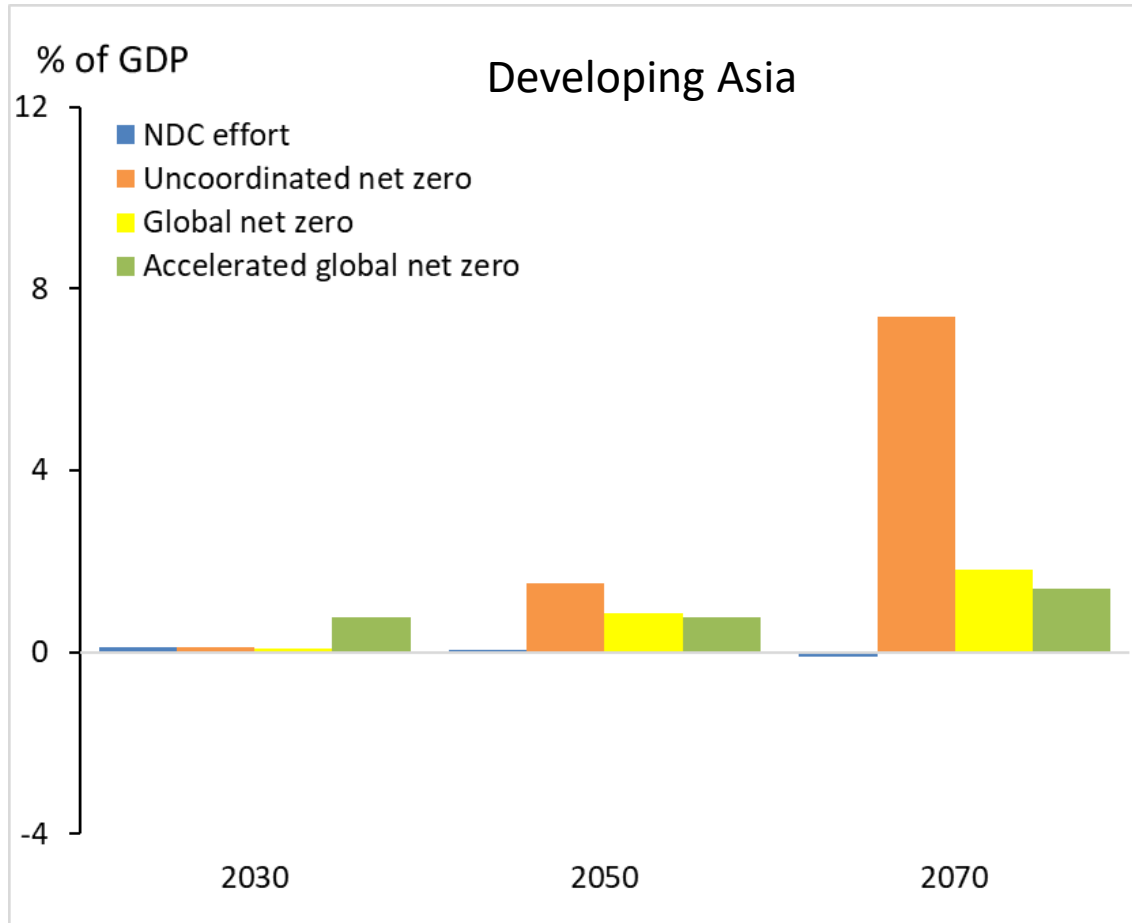
Notes: Renewables include solar, wind, hydro, and biomass. International Energy Agency (IEA) data has been downscaled using weights and aggregated to the reported region definitions.

Sources: Authors; International Energy Agency. 2020. *World Energy Outlook 2020: Access to Electricity Database*

# Socioeconomic Consequences of the Global Transition Net Zero

# Policy costs (excluding benefits) stay low for most of developing Asia, in all but the divergent net zero scenario.

**Policy costs for developing Asia under the modelled scenarios over time, excluding benefits, relative to current policies.**

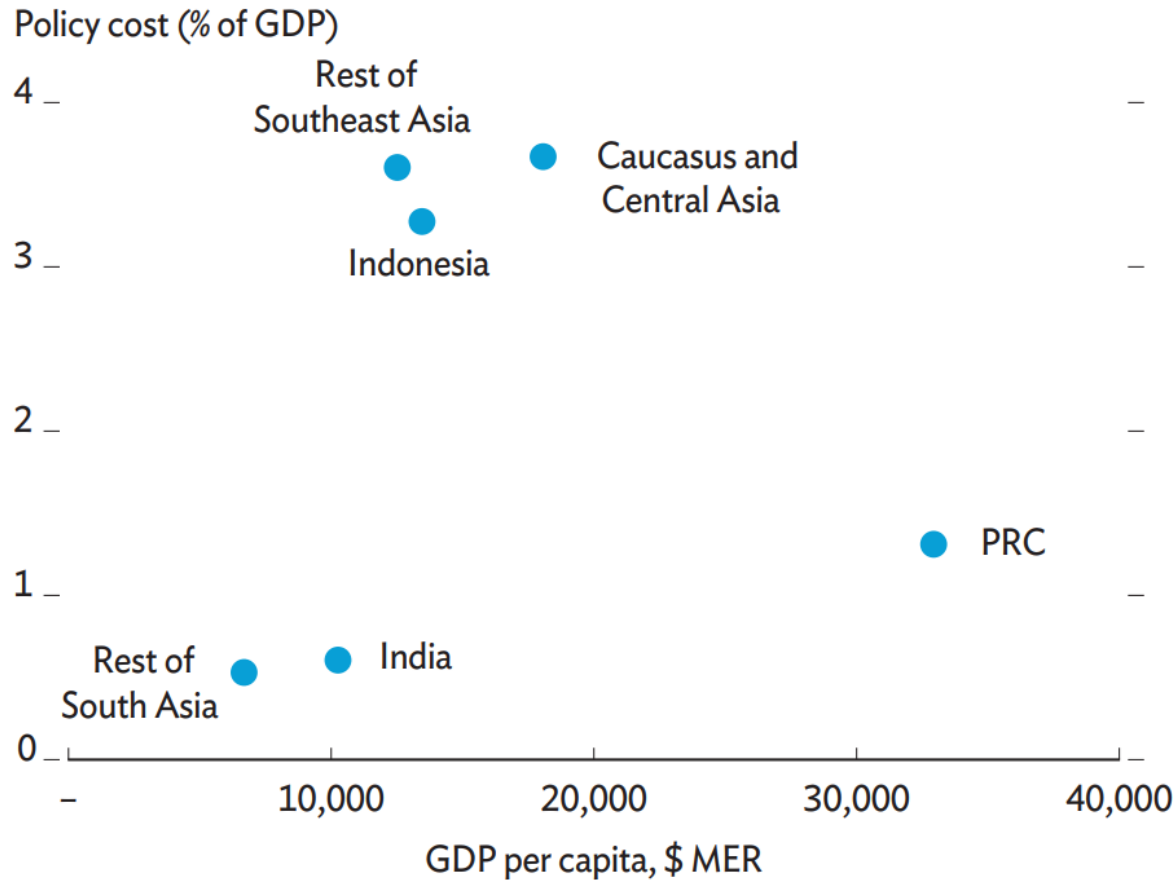


GDP=gross domestic product, NDC=nationally determined contribution.  
Source: Authors.

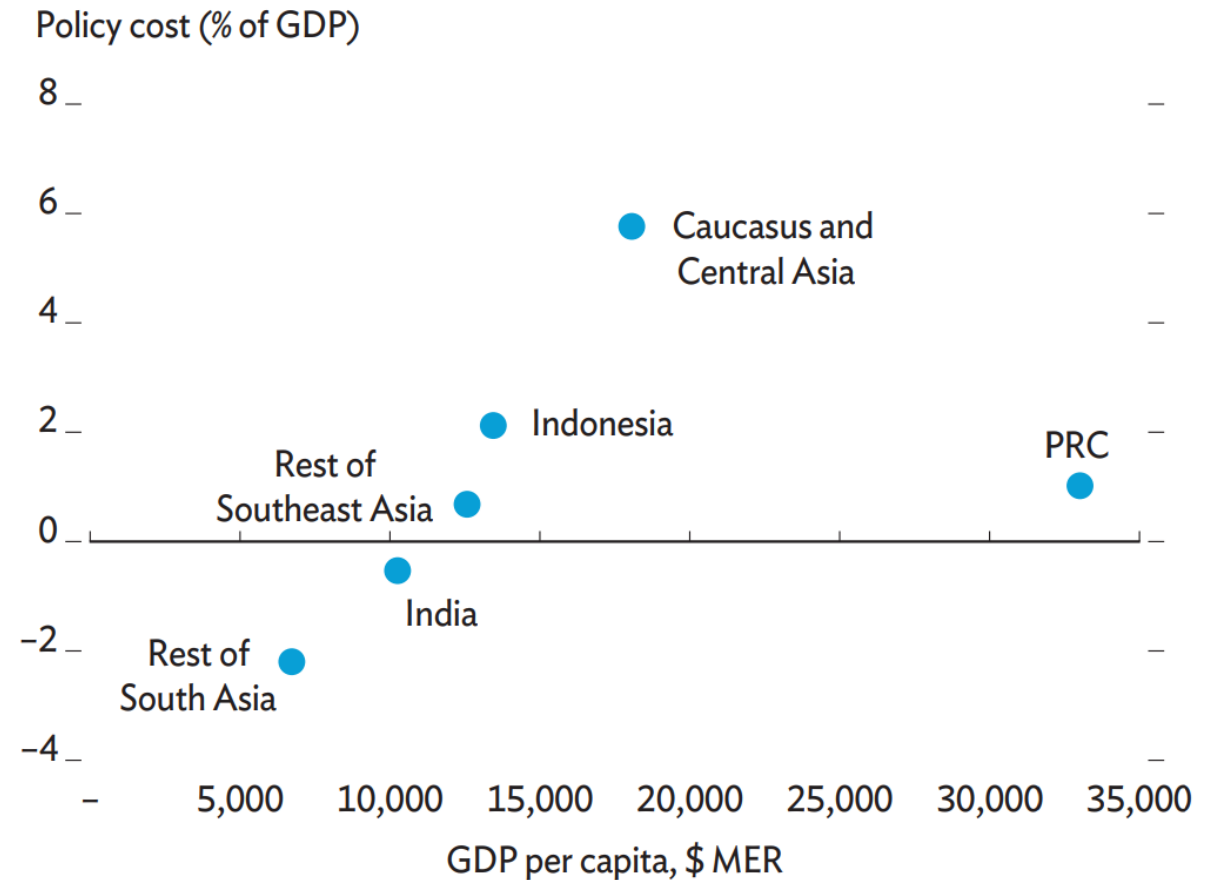
# A globally coordinated approach improves fairness for developing Asia

## Distribution of Policy Costs against per Capita Gross Domestic Product under the Modeled Scenarios, 2050

### Uncoordinated net zero



### Accelerated Global Net Zero



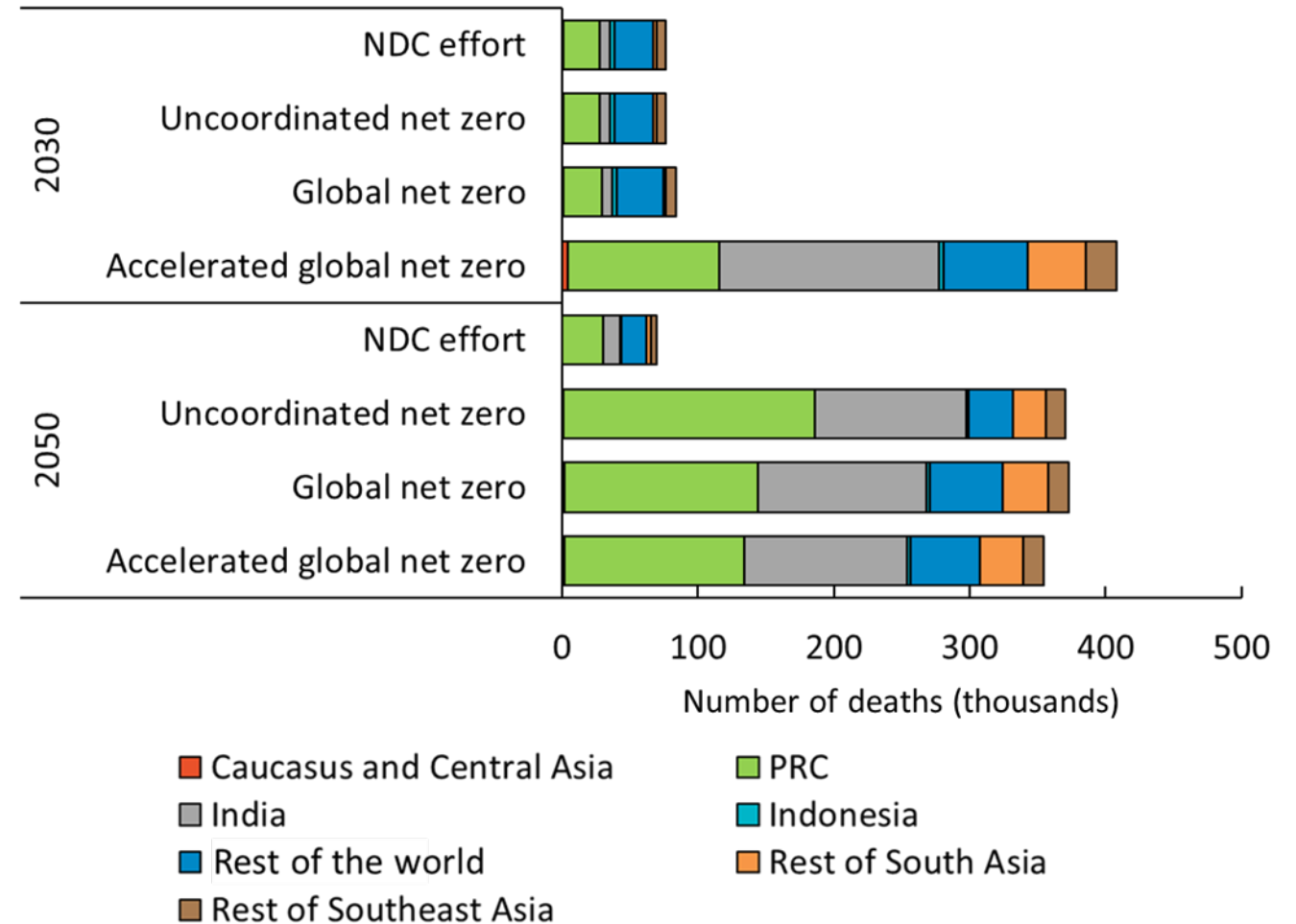
GDP = gross domestic product, MER = market exchange rate, PRC = People's Republic of China.

Source: Authors.

# The accelerated global net zero scenario helps to reduce air pollution mortality quickly.

- Air quality is a major issue for developing Asia.
  - 6 of the 10 cities with highest population weighted PM2.5 exposure globally are in the region.
- Under *accelerated net zero scenario*, **346,000 premature deaths** could be avoided annually by 2030 in the region from air pollution.

**Avoided Annual Premature Deaths Due to Outdoor Particulate Matter 2.5 and Ozone under the Modeled Scenarios Relative to the Current Policies Scenario, 2030 and 2050**

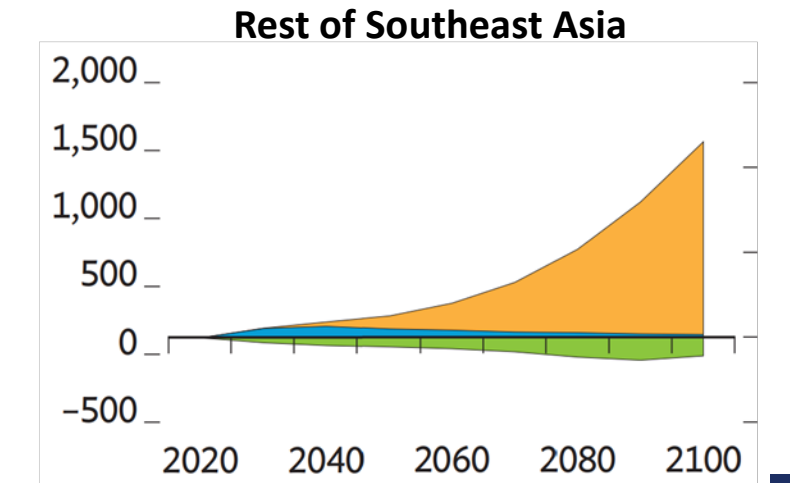
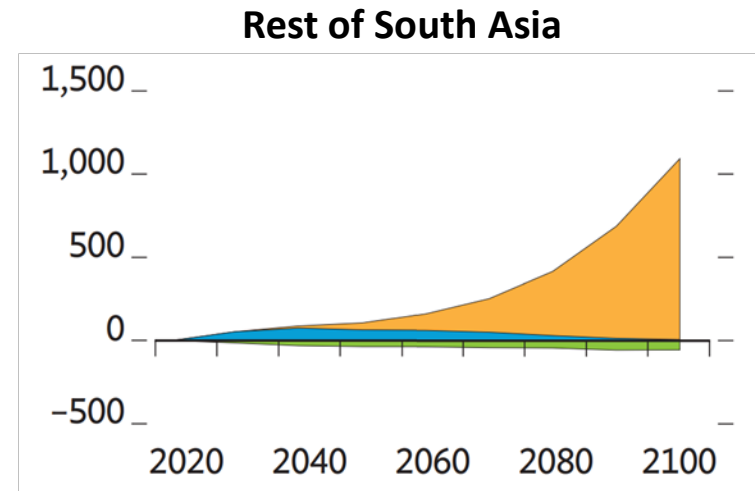
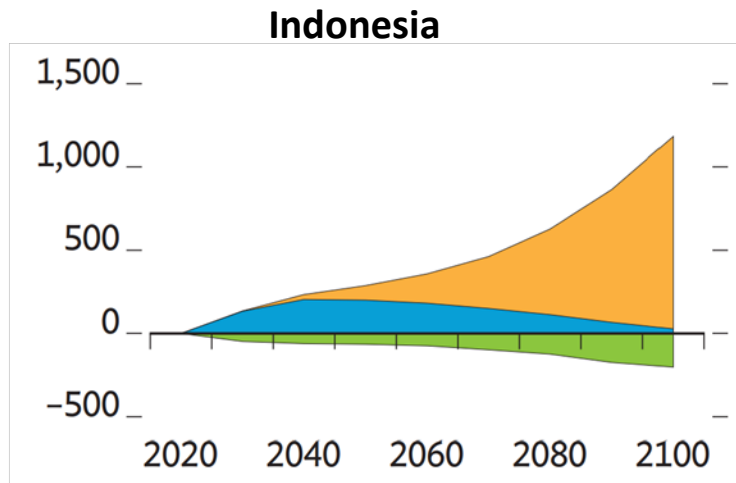
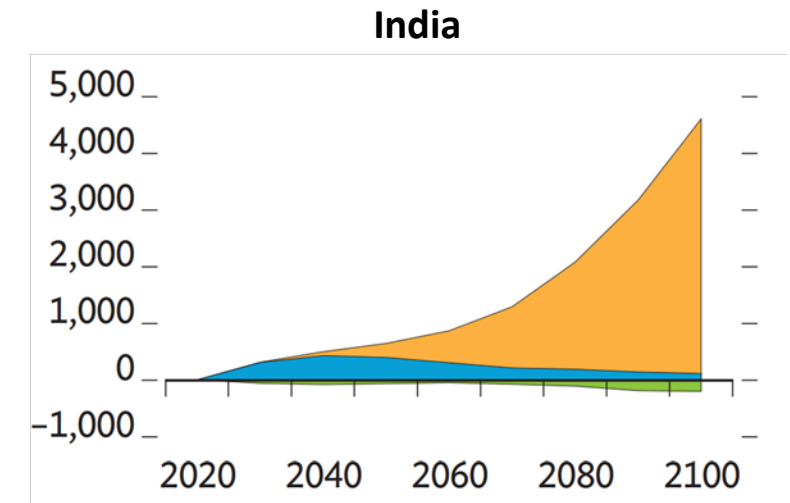
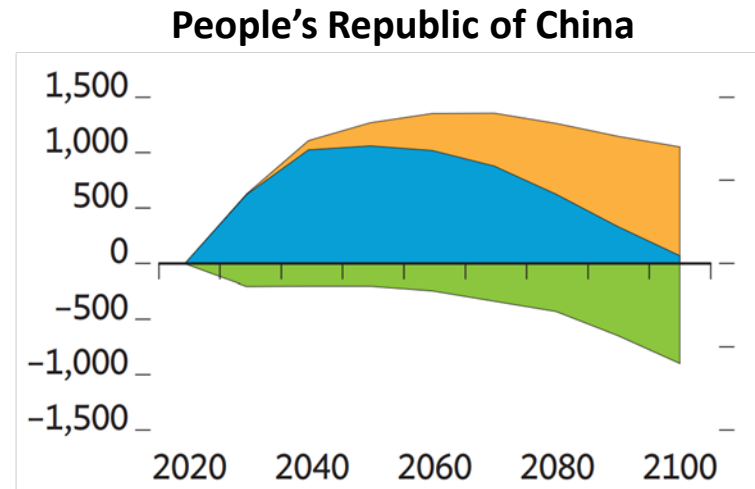
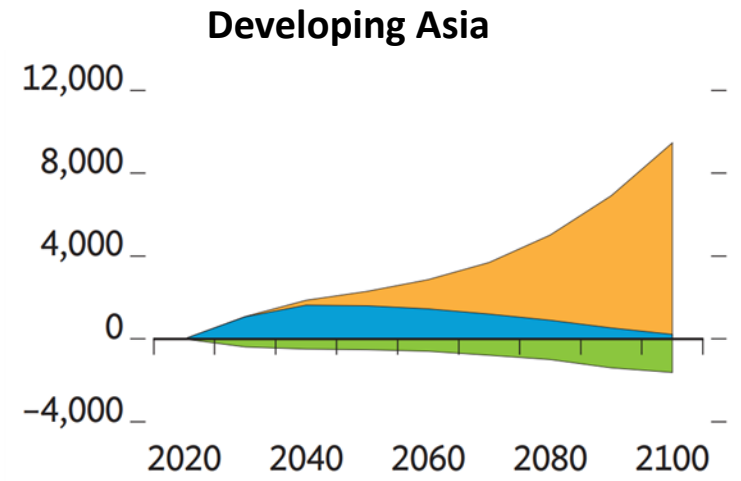


NDC = nationally determined contribution, PRC = People's Republic of China.

Source: Authors.

# The benefits of ambitious climate action are 5 times policy costs for developing Asia.

**Annual Net Policy Costs, Climate Benefits, and Air Quality Co-Benefits in Developing Asia of the Accelerated Global Net Zero Scenario Relative to the Current Policies Scenario, 2020–2100**  
(Total economic impact, \$ billion 2020)

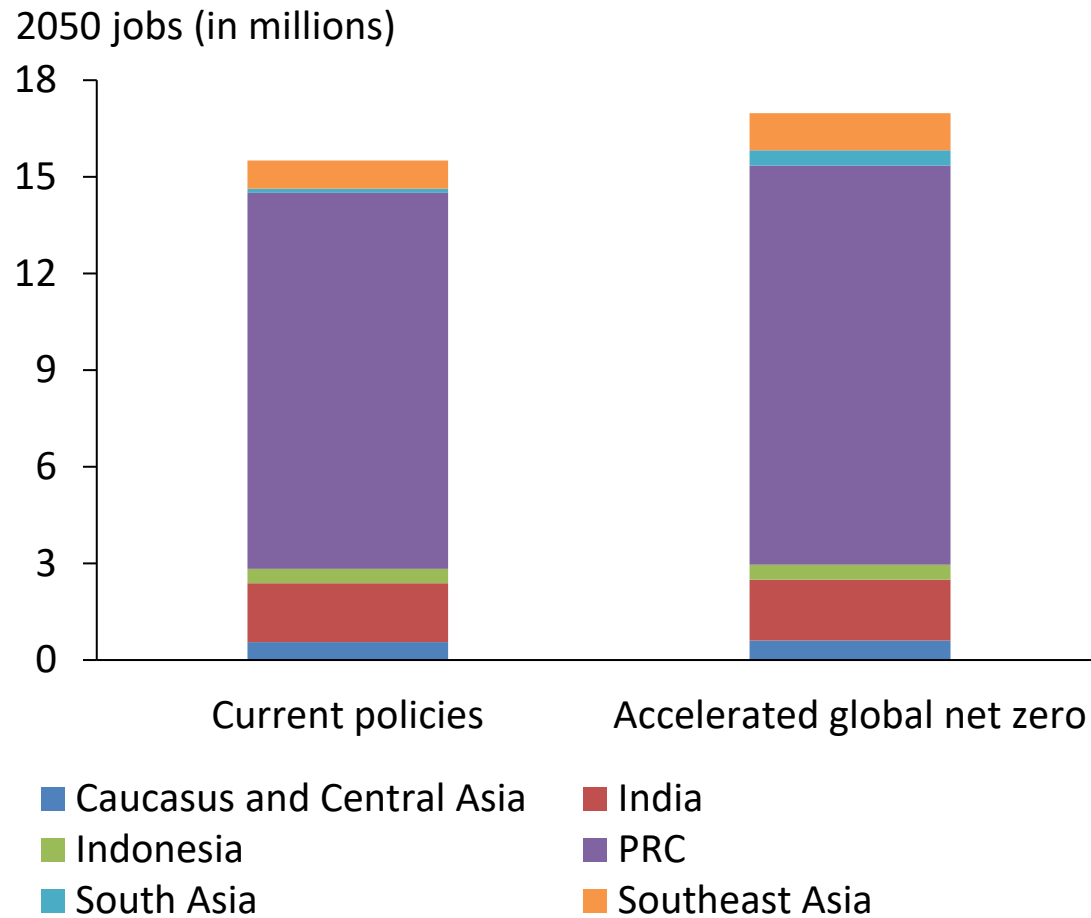


PRC = People's Republic of China.  
Source: Authors.

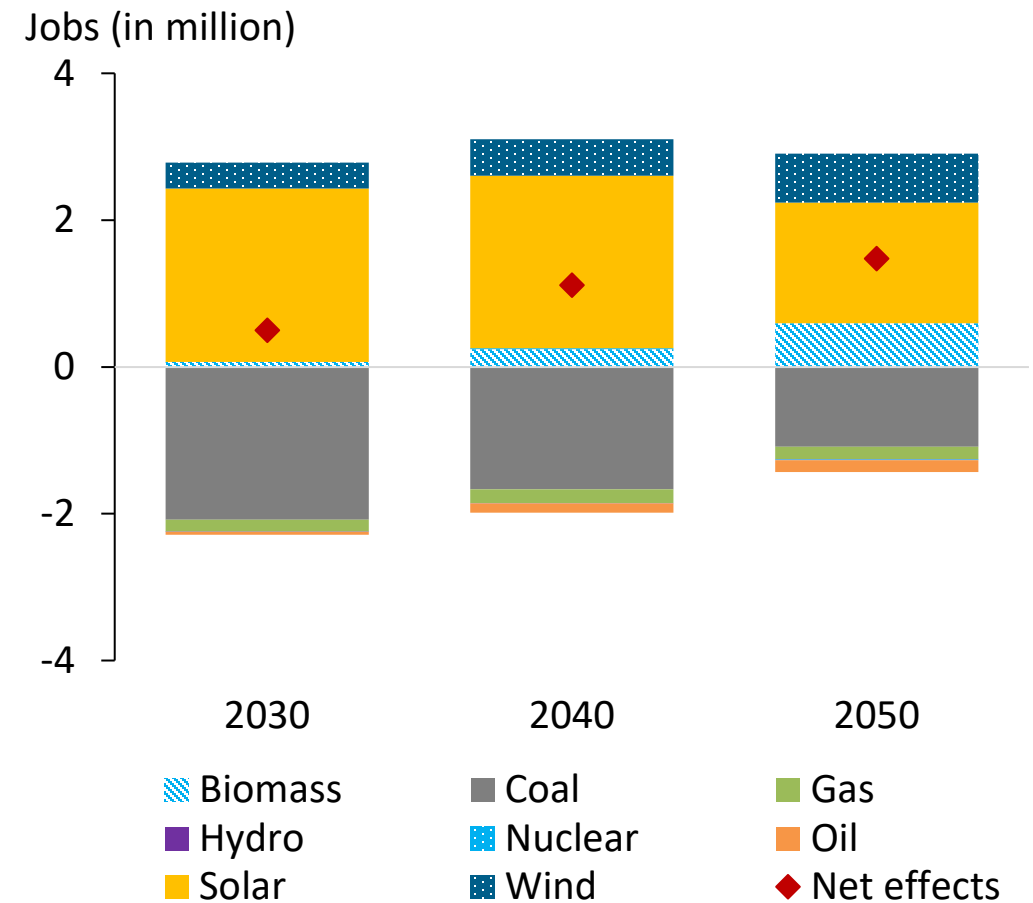
■ Climate impact
 ■ Air pollution
 ■ Mitigation cost

# The accelerated global net zero scenario increases energy sector jobs in all of developing Asia

## Total direct energy sector full time equivalent employment by region

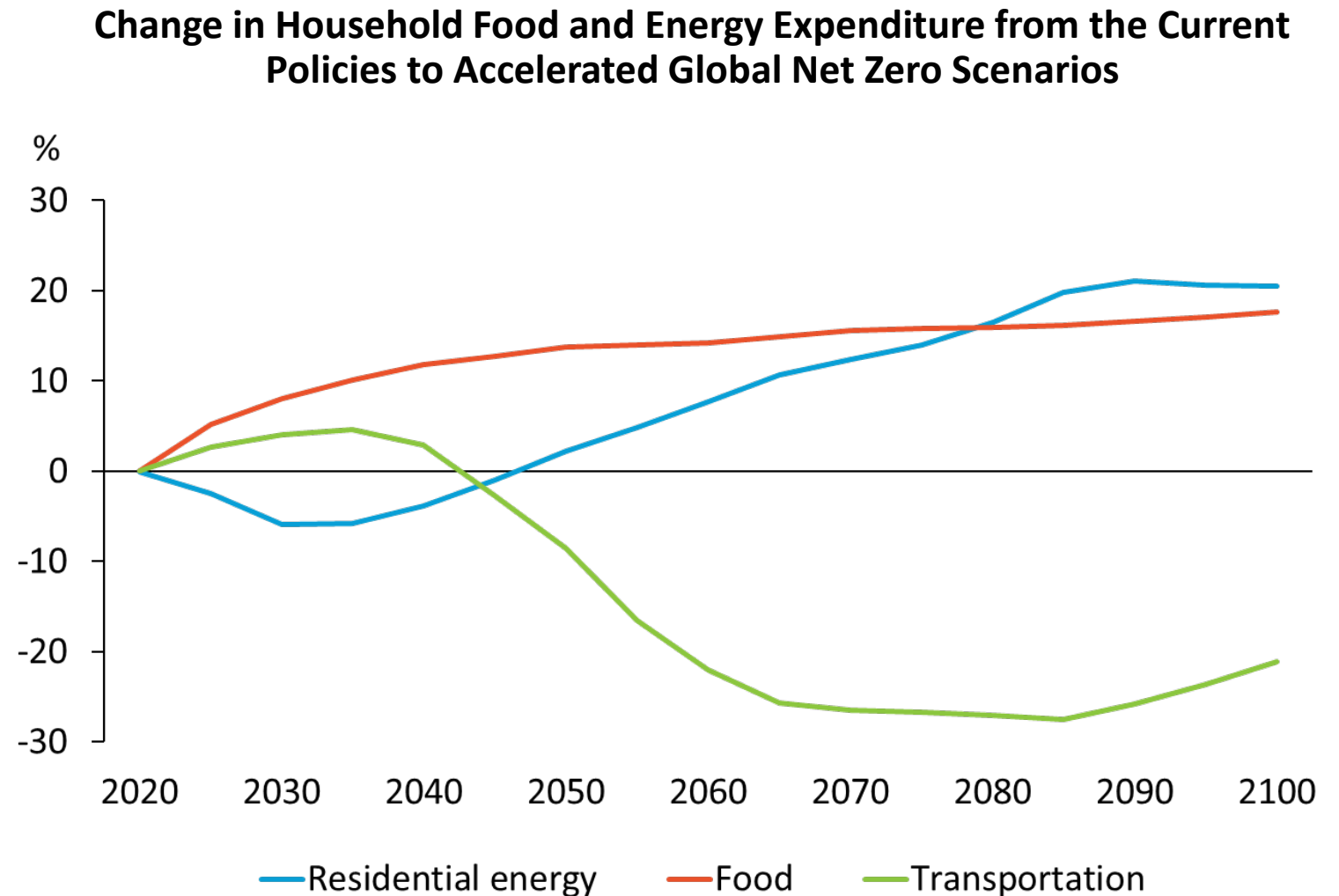


## Changes in full time direct energy sector employment by type of energy between current policies and the accelerated global net zero scenario



# Climate action principally affects households via energy and food price changes

- Ambitious decarbonization is found to:
  - Increase **food prices**
  - Increase long term residential **energy expenditures**
  - Increase, followed by eventual decrease in **transportation expenditures**



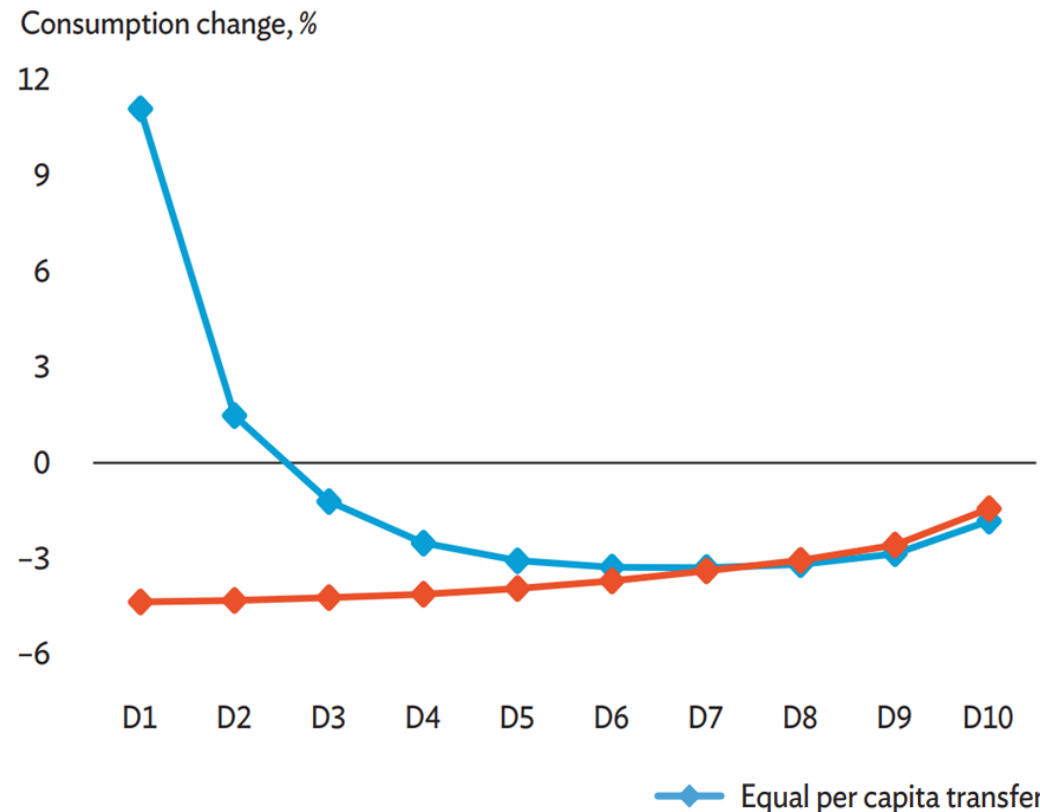
Source: Authors.



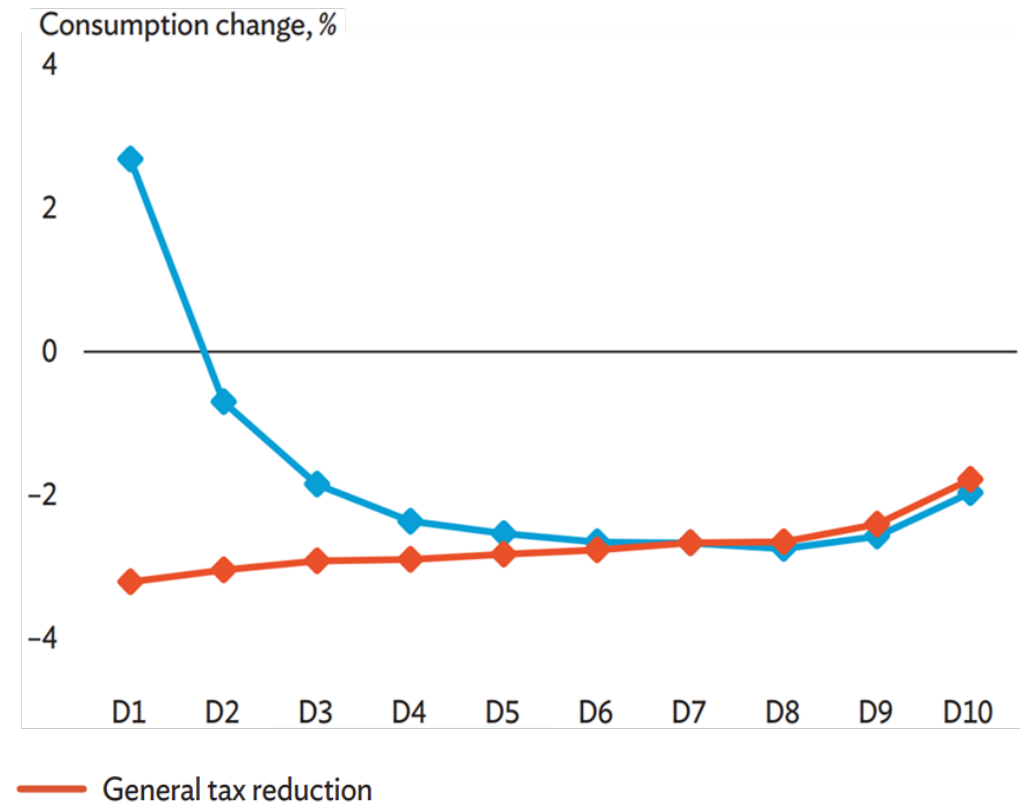
# Carbon revenue recycling can determine whether climate policy has regressive or progressive effects.

## Household Consumption Impact of the Accelerated Global Net Zero Scenario Compared to the Current Policies Scenario under Alternative Redistribution of Carbon Pricing Revenues in India and the People's Republic of China

### India



### People's Republic of China



D = income decile.  
Source: Authors.

# Policies for an Efficient and Equitable Global Transition to Net Zero

# Developing Asia can decarbonize via three policy pillars.

## Three Policy Pillars to Achieve Developing Asia's Low-Carbon Transition

### Reforming Prices

- Putting a price on carbon emissions.
- Removing subsidies that promote emissions.

### Facilitating Low-Carbon Responses

- Implementing regulations and incentives for decarbonization.
- Leveraging finance towards low carbon activities.

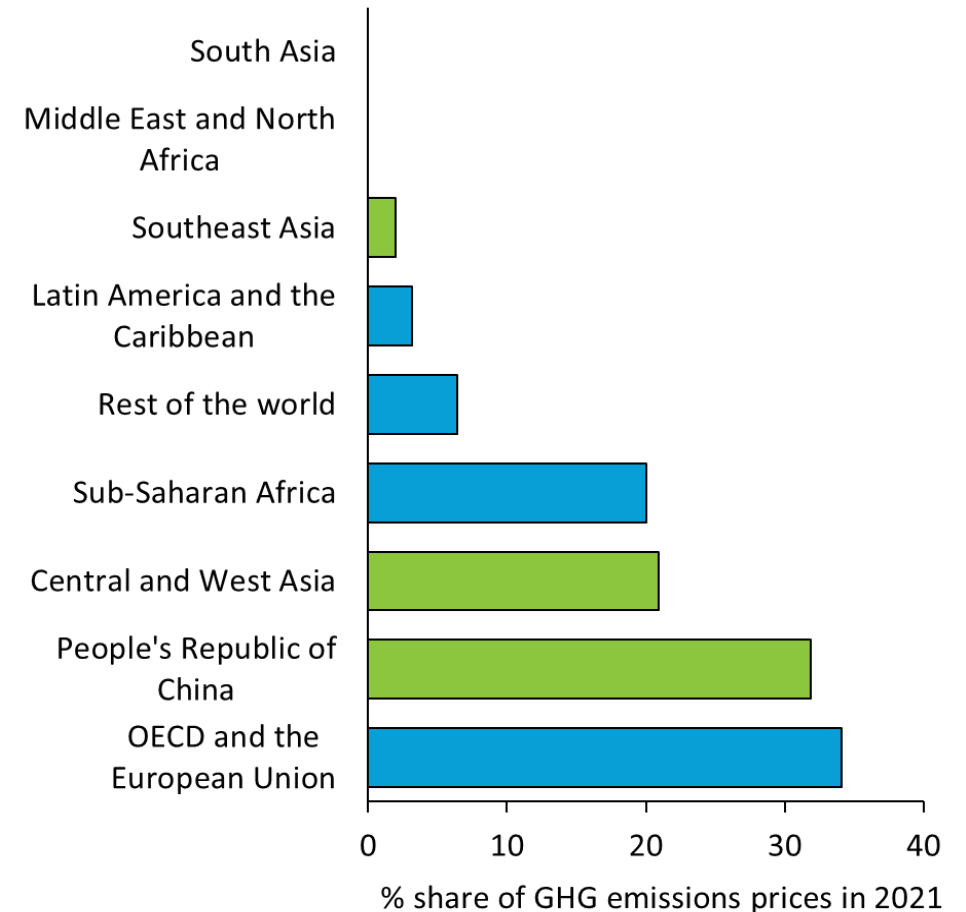
### Ensuring Fairness

- Working towards fair international mitigation burden sharing.
- Compensating and protecting vulnerable groups.
- Helping the affected to adjust.

# Reforming prices: Carbon pricing is the only policy that can ensure that mitigation effort is allocated efficiently

- Progress:
  - Higher income countries, such as PRC, Kazakhstan, Korea, and Singapore, use **carbon pricing**, and Indonesia is starting this year.
- About 21% of developing Asia's emissions have pricing, compared with 34% in the OECD & EU.
- Price levels **remain lower** than other regions.
- Barriers **limit pricing exposure** even in targeted sectors.

Coverage of Global Greenhouse Gas Emissions by Carbon Pricing, 2021

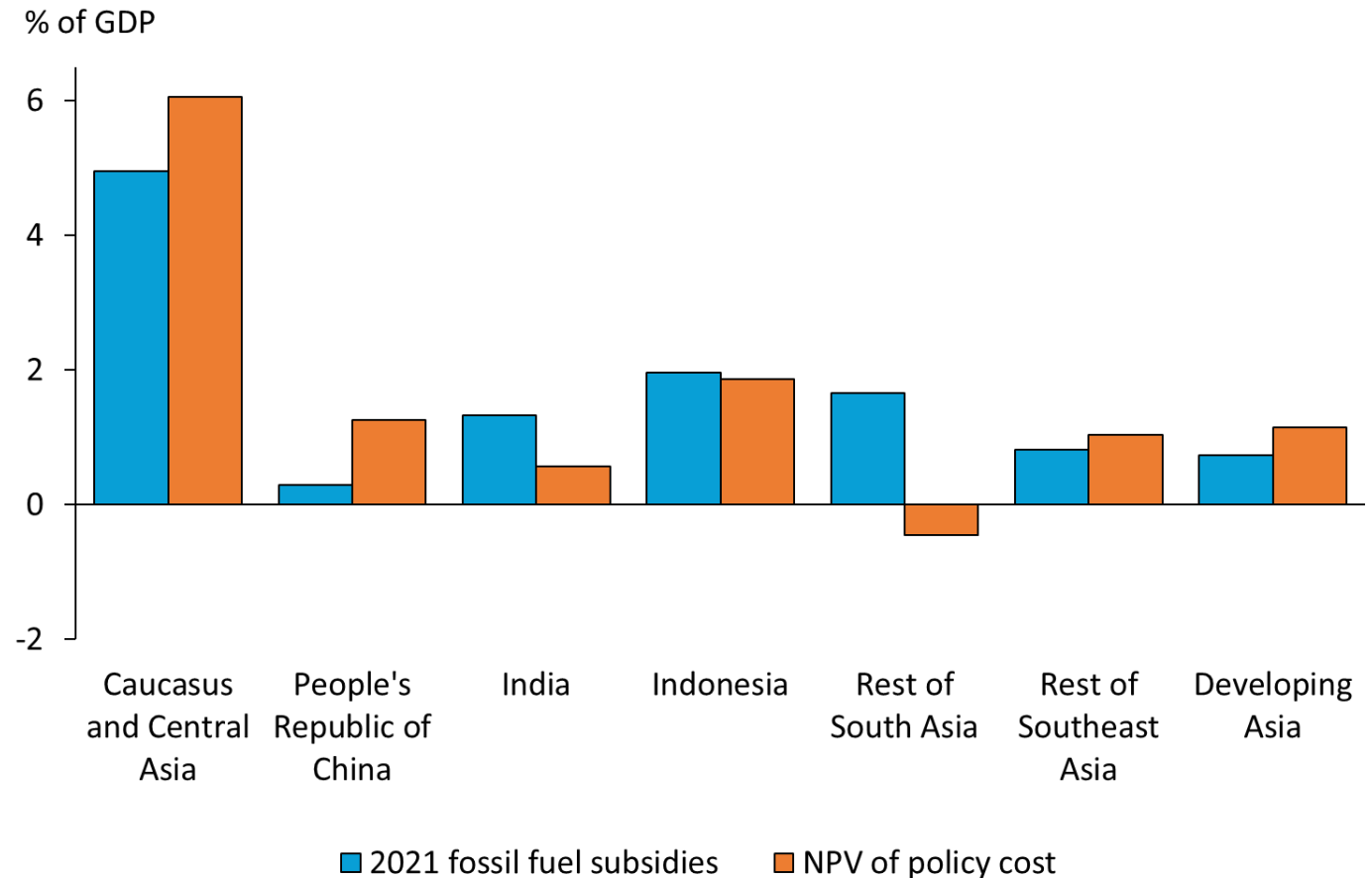


EU = European Union, GHG = greenhouse gas, OECD = Organisation for Economic Co-operation and Development.  
Source: World Bank. [Carbon Pricing Dashboard](#).

# Reforming prices: Fossil fuel and agriculture subsidies consume resources that could enable decarbonization

- **Fossil fuel subsidies** cost governments in developing Asia **nearly as much** as the most ambitious decarbonization scenario.
- Subsidies also encourage **land use emissions**. Globally, **agriculture** received \$777 billion in distorting subsidies in 2021 (OECD 2023).
  - The PRC accounts for 37% of subsidies globally.
- Concession systems may subsidize **deforestation** on public lands.

**Fossil Fuel Subsidies in Developing Asia in 2021 Compared with the Policy Costs Found for the Accelerated Net Zero Scenario**



GDP = gross domestic product, NPV = net present value.  
Sources: Authors; International Energy Agency. [Fossil Fuels Subsidy Database](#).

# Facilitating low carbon responses: Regulations, incentives, and mobilization of investment

- **Command and control regulations** are widely used in the region.
  - Standards for end uses: buildings, minimum energy efficiency performance, vehicle fuel economy
  - Mandates for vehicle biofuel blending, renewable energy shares
  - Labeling for energy efficiency
- **Subsidies** and fiscal incentives also target clean energy adoption.
  - Feed-in-tariffs for renewables, tax exemptions and subsidies for electric vehicles
- Yet, **coverage gaps remain**, and green subsidies are outweighed by subsidies to fossil fuels.
- The **private sector** accounts for 49% of global climate finance in 2019-2020, and this needs to rise (IEA 2021, UNFCCC 2021).
- Governments can **de-risk** green projects to improve their risk return profiles and can help develop **green and transition** finance markets to attract additional investment.

# Ensuring fairness: A low carbon transition must be just to succeed.

## Ensuring international fairness

- An **international emissions allocation framework** could enable fairer climate policy outcomes, by coordinating NDC mitigation commitments as a basis for carbon trade.

## Ensuring domestic fairness

- **Carbon revenue recycling** can help offset impacts on low-income households through **higher prices** of essentials, **employment effects**, and **access to land**.
- **Training and reskilling** can help integrate those adversely affected, while **social protection** help smooth the transition.
- **Investing in agriculture** and **strengthening land rights** are critical to safeguard the welfare of the vulnerable.



# ASIA IN THE GLOBAL TRANSITION TO NET ZERO

Thematic Report of the  
Asian Development Outlook 2023

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Download here: <https://www.adb.org/ado-2023-thematic-report>

Thank you!



ADB



# PANEL DISCUSSION C

**Design, Implementation and Monitoring:  
The Role of CG Schemes in Addressing the Perceived  
Higher Risks Associated with Green Finance Investments**





**PHILGUARANTEE**  
Philippine Guarantee Corporation

The Principal Agency  
for State Guarantee  
Finance of the  
Philippines



# Philippine Sustainable Energy Initiatives

*Supporting Resilient  
Business Growth*

**Celso R. Gutierrez**

SVP – Priority Sectors Guarantee Group

**Alberto E. Pascual**

President and Chief Executive Officer  
Philippine Guarantee Corporation

**35th Asian Credit  
Supplementation  
Institution Confederation  
(ACSIC) Conference**

Ulaanbaatar,  
Mongolia  
August 6-10,  
2022



In 2017, the Philippine Government revisited its policy and direction on credit guarantees in the context of risk management, capitalization and absorptive capacity. The result of which is the transformation journey following the issuance of Executive Order No. 58, s. 2018 with the consolidation and merger of Philippine Guarantee Programs and Agencies.



# OUR

# VISION

By 2025, PHILGUARANTEE shall be a strong and trusted State-Owned Enterprise, the reliable and responsive partner in championing inclusive growth and catalyzing regional development of economic sectors, and a key regional player for guarantee finance in the ASEAN Community.



# THE

# MISSION

As the Principal Agency for State Guarantee Finance of the Philippines, we provide accessible, reliable and efficient guarantee systems to enable credit for stakeholders in trade and investments, infrastructure, housing, agriculture, MSMEs and other priority sectors of the government.



# PRIORITY AREAS SUPPORTED BY MANDATE

# MANDATE

The Philippine Guarantee Corporation (PHILGUARANTEE) is a government-owned-and-controlled corporation (GOCC) resulting from the merger and consolidation of five Philippine Guarantee programs and agencies (PGPAs) pursuant to Executive Order no. 58, series of 2019 effective as of August 31, 2019. PHILGUARANTEE is the former Trade and Investment Development Corporation (TIDCORP), the surviving entity in the amalgamation of the PGPAs.

Being the Principal Agency of for State Guarantee Finance of the Philippines, the primary objective of PHILGUARANTEE is to perform its development financing role through the provision of credit guarantees in support of trade and investments, exports, infrastructure, energy, tourism, agricultural, business/modernization, housing, MSMEs and other priority sectors of the economy, with the end in view of facilitating and promoting socio-economic and regional development.



**MSMES AND OTHER  
PRIORITY SECTORS OF  
THE GOVERNMENT  
(INFRASTRUCTURE,  
ENERGY, TOURISM, AGRI-  
MODERNIZATION)**



**HOUSING SECTOR**



**AGRICULTURE SECTOR**



**OTHER INDUSTRIES (THE  
PROMOTION OF WHICH IS  
ENCOURAGED BY  
GOVERNMENT POLICY)**



**PHILGUARANTEE**  
Philippine Guarantee Corporation

The Principal Agency  
for State Guarantee  
Finance of the  
Philippines



# The current situation

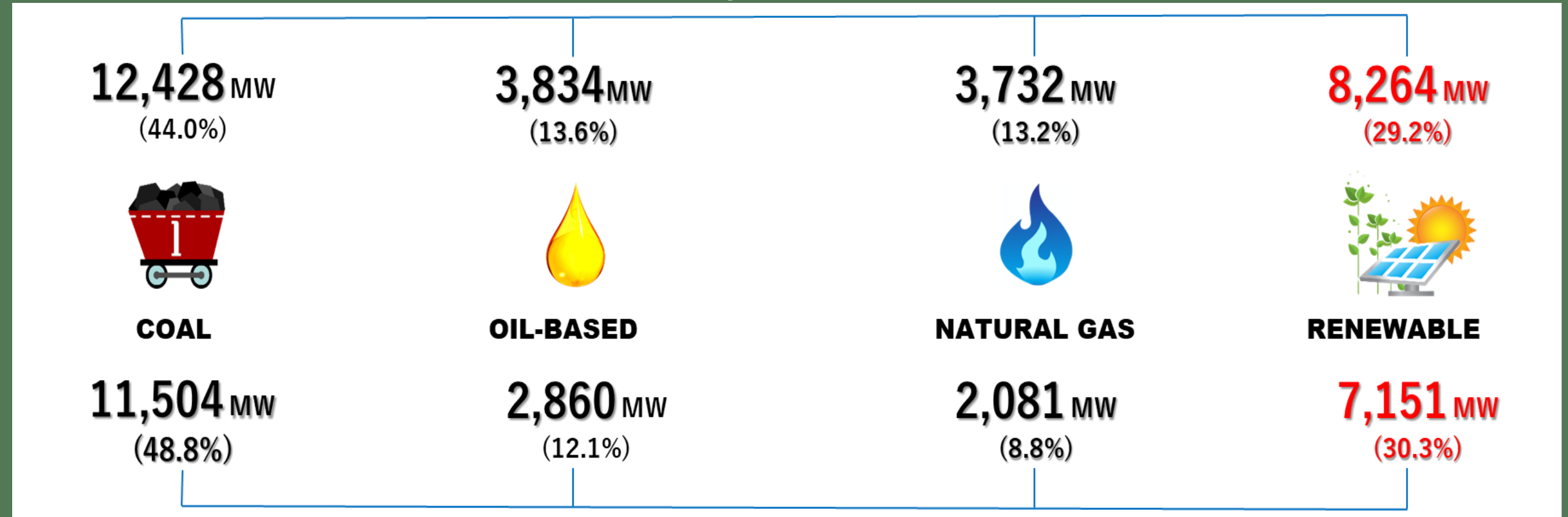




# INSTALLED CAPACITY

28,258 MW

# POWER GENERATION CAPACITY (2022)



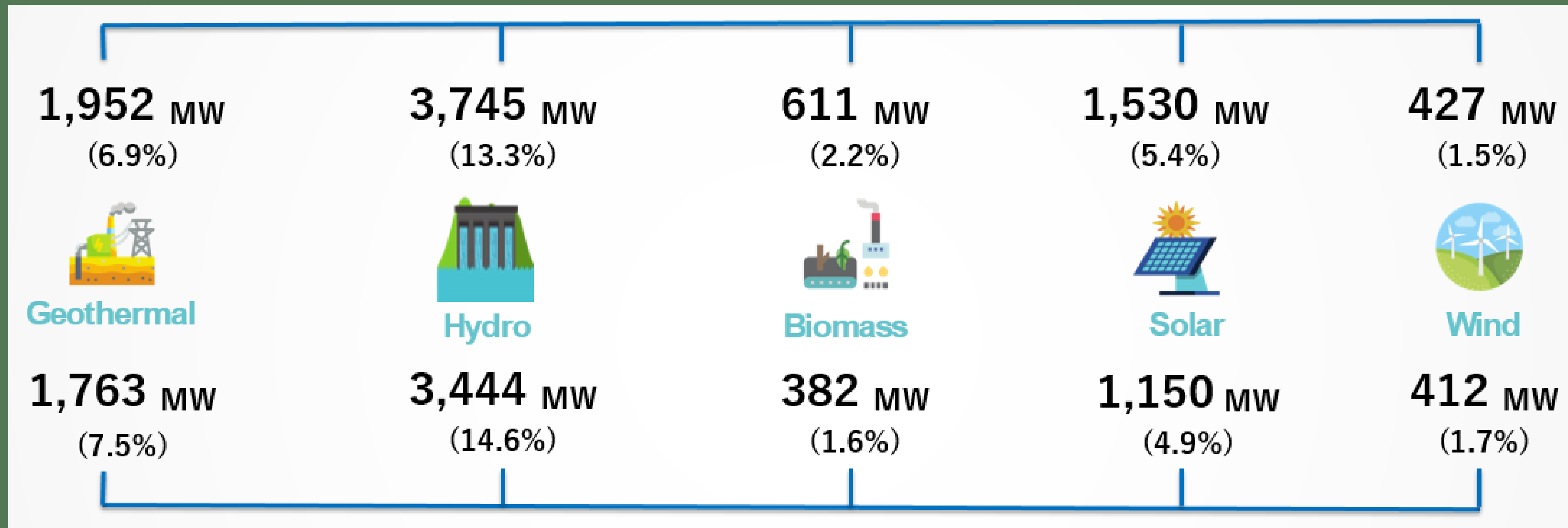
23,596 MW

# DEPENDABLE CAPACITY

# RENEWABLE ENERGY GENERATION CAPACITY (2022)



**INSTALLED CAPACITY**  
8,264 MW (29.2%)



**7,151 MW (30.2%)**  
**DEPENDABLE CAPACITY**



# 2010 NATIONAL RENEWABLE ENERGY PROGRAM



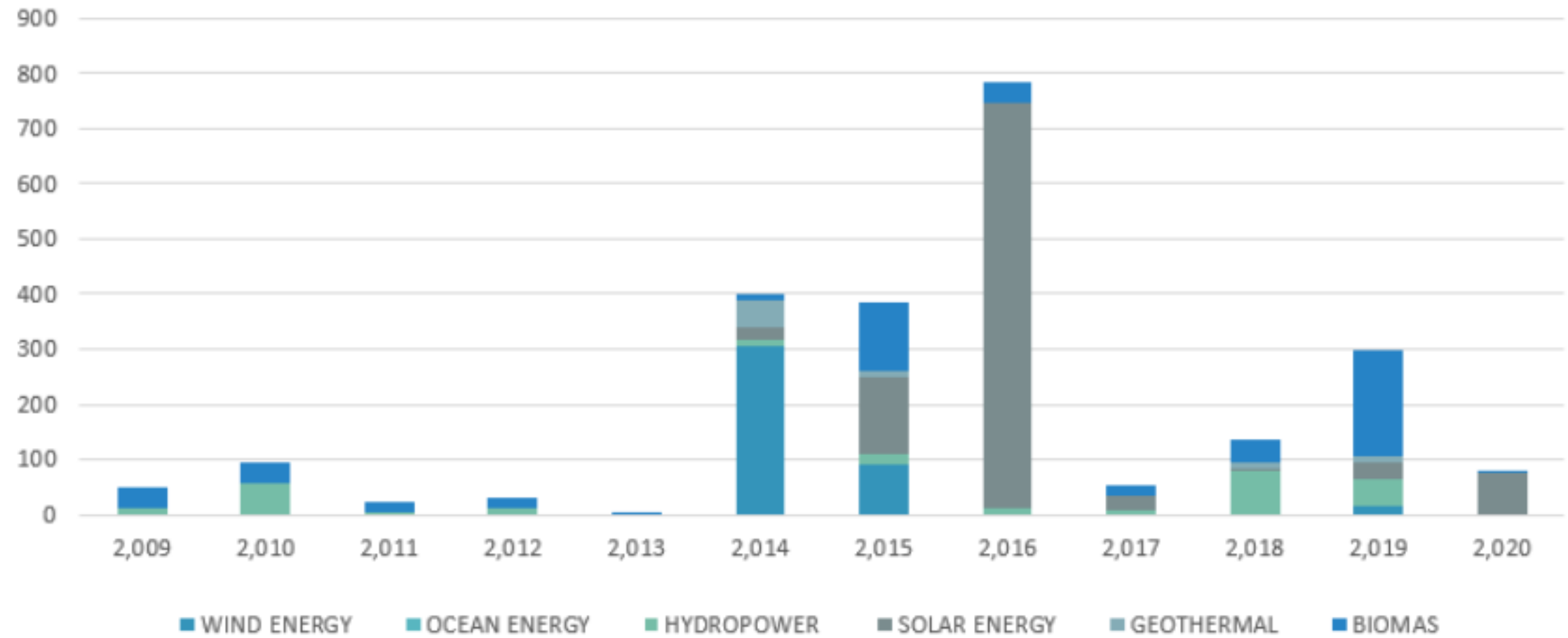
| Sector       | Installed Capacity, (MW) as of 2010 | Target Capacity Addition by |                |                |             | Total Capacity Addition (MW) 2011-2030 | Total Installed Capacity by 2030 |
|--------------|-------------------------------------|-----------------------------|----------------|----------------|-------------|--|----------------------------------|
|              |                                     | 2015                        | 2020           | 2025           | 2030        |  |                                  |
| Geothermal   | 1,966.0                             | 220.0                       | 1,100.0        | 95.0           | 80.0        | 1,495.0                                | 3,461.0                          |
| Hydro        | 3,400.0                             | 341.3                       | 3,161.0        | 1,891.8        | 0.0         | 5,394.1                                | 8,724.1                          |
| Biomass      | 39.0                                | 276.7                       | 0.0            | 0.0            | 0.0         | 276.7                                  | 315.7                            |
| Wind         | 33.0                                | 1,048.0                     | 855.0          | 442.0          | 0.0         | 2,345.0                                | 2,378.0                          |
| Solar        | 1.0                                 | 269.0                       | 5.0            | 5.0            | 5.0         | 284.0"                                 | 285.0                            |
| Ocean        | 0.0                                 | 0.0                         | 35.5           | 35.0           | 0.0         | 70.5                                   | 70.5                             |
| <b>TOTAL</b> | <b>5,438.0</b>                      | <b>2,155.0</b>              | <b>5,156.5</b> | <b>2,468.8</b> | <b>85.0</b> | <b>9,865.3</b>                         | <b>15,304.3</b>                  |

**RE-BASED CAPACITY INSTALLATION TARGETS, PHILIPPINES**



# RENEWABLE ENERGY CAPACITY ADDITIONS 2009-2019

|   |                           |
|---|---------------------------|
| <b>Total Capacity Additions</b>   | <b>Cost of Investment</b> |
| 1,033.13 MW  | PhP 86.8 Billion          |
| 550.04 MW   | PhP 33.1 Billion          |
| 409.90 MW  | PhP 52.9 Billion          |
| 263.13 MW  | PhP 37.9 Billion          |
| 82.5 MW    | PhP 10.5 Billion          |



|              | 2009         | 2010         | 2011        | 2012        | 2013        | 2014          | 2015          | 2016          | 2017         | 2018          | 2019          | 2020        |
|--------------|--------------|--------------|-------------|-------------|-------------|---------------|---------------|---------------|--------------|---------------|---------------|-------------|
| WIND ENERGY  |              |              |             |             |             | 304           | 90            |               |              |               | 16            |             |
| OCEAN ENERGY |              |              |             |             |             |               |               |               |              |               |               |             |
| HYDROPOWER   | 10.4         | 57.3         | 4.2         | 11.8        |             | 13.645        | 17.82         | 10.45         | 8.5          | 78.923        | 49.79         | 0.3         |
| SOLAR ENERGY |              |              |             |             |             | 22            | 142.47        | 734.715       | 25.197       | 4.196         | 29.548        | 75          |
| GEOTHERMAL   |              |              |             |             |             | 50            | 10            |               |              | 12            | 10.5          |             |
| BIOMAS       | 37.325       | 37.15        | 19          | 19          | 0.879       | 12            | 124.5         | 40.8          | 18.124       | 41.735        | 193.53        | 6           |
| <b>TOTAL</b> | <b>47.73</b> | <b>94.45</b> | <b>23.2</b> | <b>30.8</b> | <b>0.88</b> | <b>401.55</b> | <b>384.79</b> | <b>785.97</b> | <b>51.82</b> | <b>136.85</b> | <b>299.37</b> | <b>81.3</b> |

# RENEWABLE ENERGY DECLINING LEVELS of SELF-SUFFICIENCY



| Resource                | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019           |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Coal                    | 25.9%         | 26.6%         | 34.4%         | 36.6%         | 38.8%         | 42.6%         | 42.8%         | 44.5%         | 47.7%         | 49.6%         | 52.1%         | 54.6%          |
| Oil-Based               | 8.0%          | 8.7%          | 10.5%         | 4.9%          | 5.8%          | 6.0%          | 7.4%          | 7.1%          | 6.2%          | 4.0%          | 3.2%          | 3.5%           |
| Natural Gas             | 32.2%         | 32.1%         | 28.8%         | 29.8%         | 26.9%         | 25.0%         | 24.2%         | 22.9%         | 21.9%         | 21.8%         | 21.4%         | 21.1%          |
| Renewable Energy        | 33.9%         | 32.6%         | 26.3%         | 28.7%         | 28.5%         | 26.4%         | 25.6%         | 25.4%         | 24.2%         | 24.6%         | 23.4%         | 20.8%          |
| Geothermal              | 17.6%         | 16.7%         | 14.7%         | 14.4%         | 14.1%         | 12.8%         | 13.3%         | 13.4%         | 12.2%         | 10.9%         | 10.5%         | 10.1%          |
| Hydro                   | 16.2%         | 15.8%         | 11.5%         | 14.0%         | 14.1%         | 13.3%         | 11.8%         | 10.5%         | 8.9%          | 10.2%         | 9.4%          | 7.6%           |
| Biomass                 | 0.0%          | 0.0%          | 0.0%          | 0.2%          | 0.3%          | 0.3%          | 0.3%          | 0.4%          | 0.8%          | 1.1%          | 1.1%          | 1.0%           |
| Solar                   | 0.0%          | 0.0%          | 0.0%          | 0.0%          | 0.0%          | 0.0%          | 0.0%          | 0.2%          | 1.2%          | 1.3%          | 1.3%          | 1.2%           |
| Wind                    | 0.1%          | 0.1%          | 0.1%          | 0.1%          | 0.1%          | 0.1%          | 0.2%          | 0.9%          | 1.1%          | 1.2%          | 1.2%          | 1.0%           |
| <b>Total in GWh</b>     | <b>60,821</b> | <b>61,934</b> | <b>67,743</b> | <b>69,176</b> | <b>72,922</b> | <b>75,266</b> | <b>77,261</b> | <b>82,413</b> | <b>90,798</b> | <b>94,370</b> | <b>99,765</b> | <b>106,041</b> |
| <b>Self-Sufficiency</b> | <b>67.09</b>  | <b>65.81</b>  | <b>57.49</b>  | <b>61.14</b>  | <b>58.78</b>  | <b>56.24</b>  | <b>53.47</b>  | <b>53.15</b>  | <b>51.02</b>  | <b>53.85</b>  | <b>51.04</b>  | <b>46.85</b>   |

**Power Generation by Source in %Share, Total Philippines**

# DRIVERS OF HIGH ELECTRICITY PRICES

01

Insufficient supply of electricity

02

Insufficient transmission and distribution infrastructure

03

Lack of indigenous conventional fuel sources (coal and oil)

04

Inconsistent policies resulting in delayed new capacities



The Principal Agency  
for State Guarantee  
Finance of the  
Philippines



# Creating the Economic Environment



# RENEWABLE ENERGY RESOURCES



## **B**IOMASS (**B**AGASSE)

Potential of  
4,449.54 MW



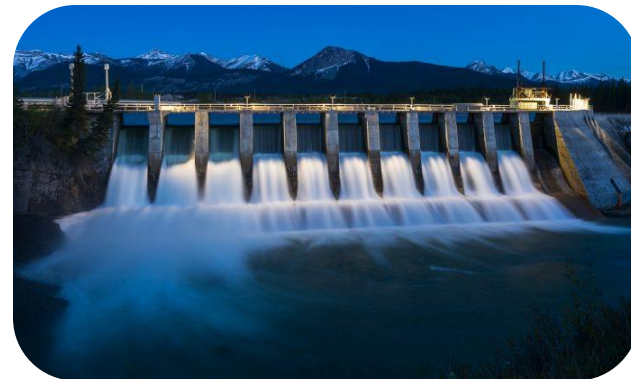
## **G**EOTHERMAL **R**ESOURCE

Potential of  
1,200 MW



## **S**OLAR ENERGY

Average potential  
5kWh/m<sup>2</sup>/day



## **H**YDROPOWER

10,500 MW



## **O**CEAN ENERGY

170,000 MW



## **W**IND **R**ESOURCES

76,600 MW



# FOCUSED ON RENEWABLES



**DEPLETION NOT  
AN ISSUE  
AVAILABLE  
ENDLESSLY**



**SAVE ON  
ELECTRICITY  
EXPENSE**



**LOWER CARBON  
EMISSIONS**



**LOWER  
DEPENDENCE ON  
FOSSIL FUELS**



# PHILIPPINE RENEWABLE ENERGY LAWS

## **Biofuels Act of 2006**

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Provides fiscal incentives and mandates the use of biofuel-blended gasoline and dieselfuels (Republic Act No.9367)

## **Renewable Energy Act of 2008**

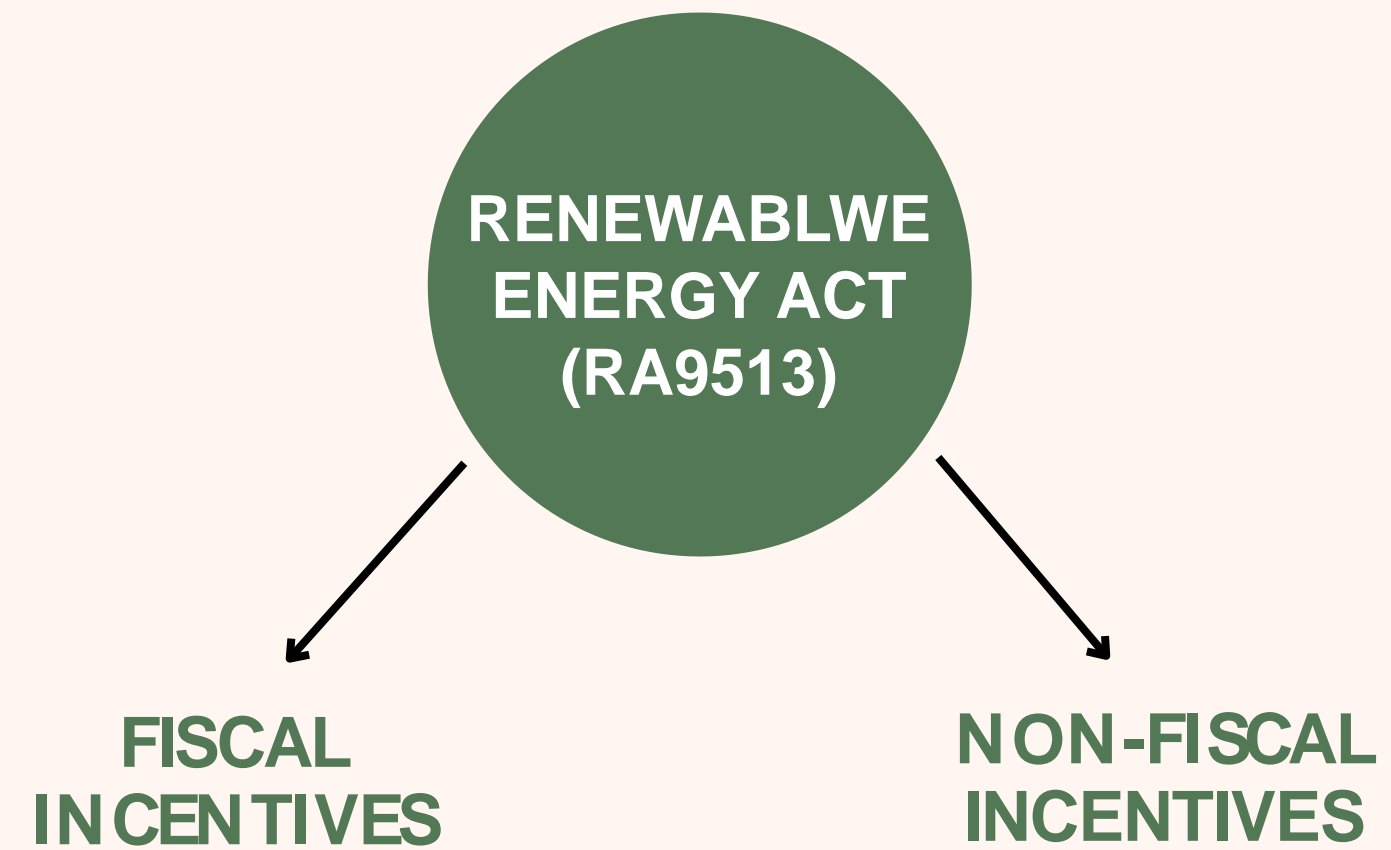
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Provides fiscal and non-fiscal incentives to private sector developers and manufacturers (Republic Act No. 9513)

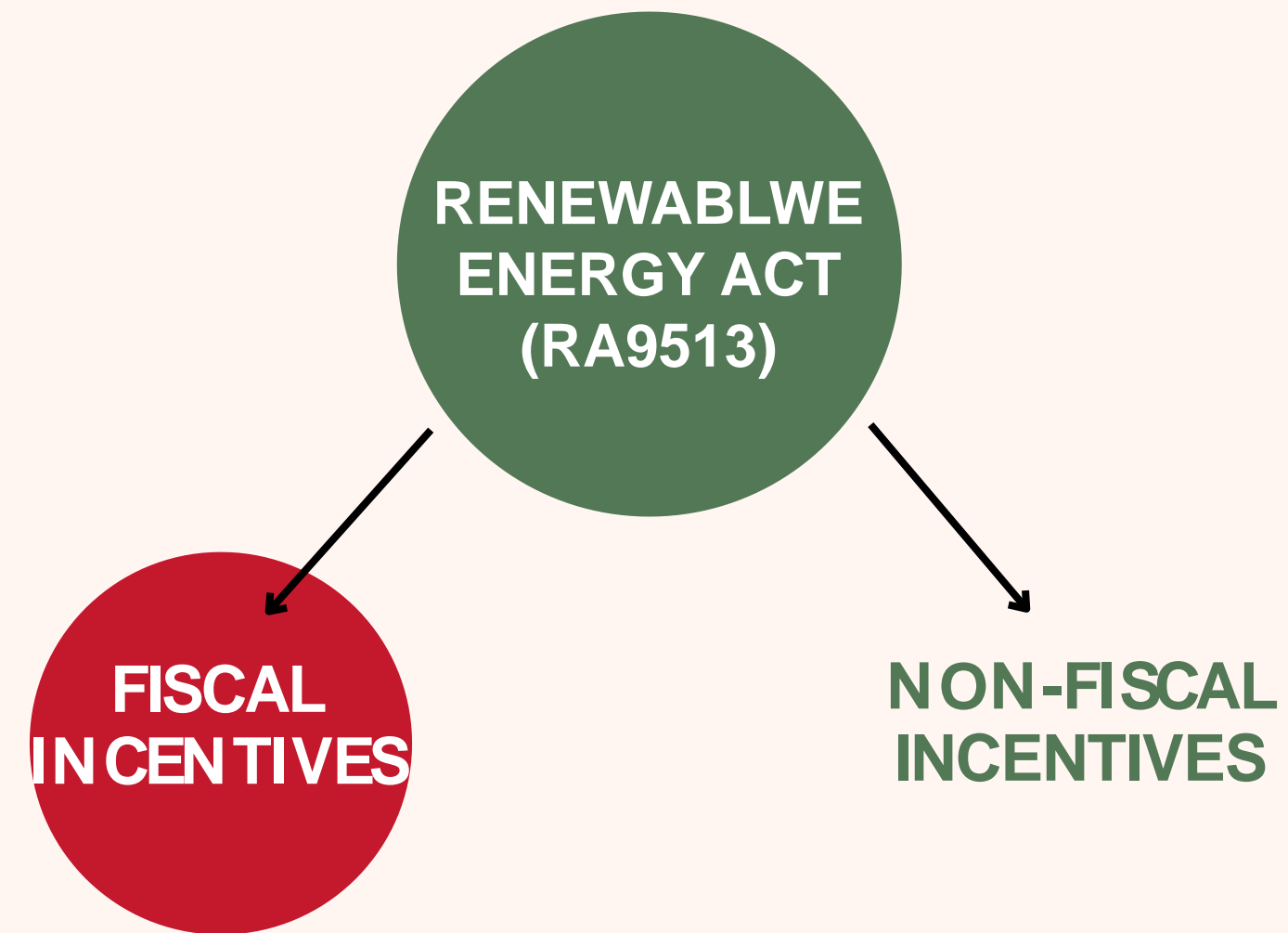
## **Energy Efficiency and Conservation Act of 2018**

Comprehensive Approach to encourage adoption of Energy Efficient technology, Renewable Energy sources and Conservation Plans (Republic Act No. 11285)

# INCENTIVES UNDER THE RENEWABLE ENERGY ACT



# INCENTIVES UNDER THE RENEWABLE ENERGY ACT

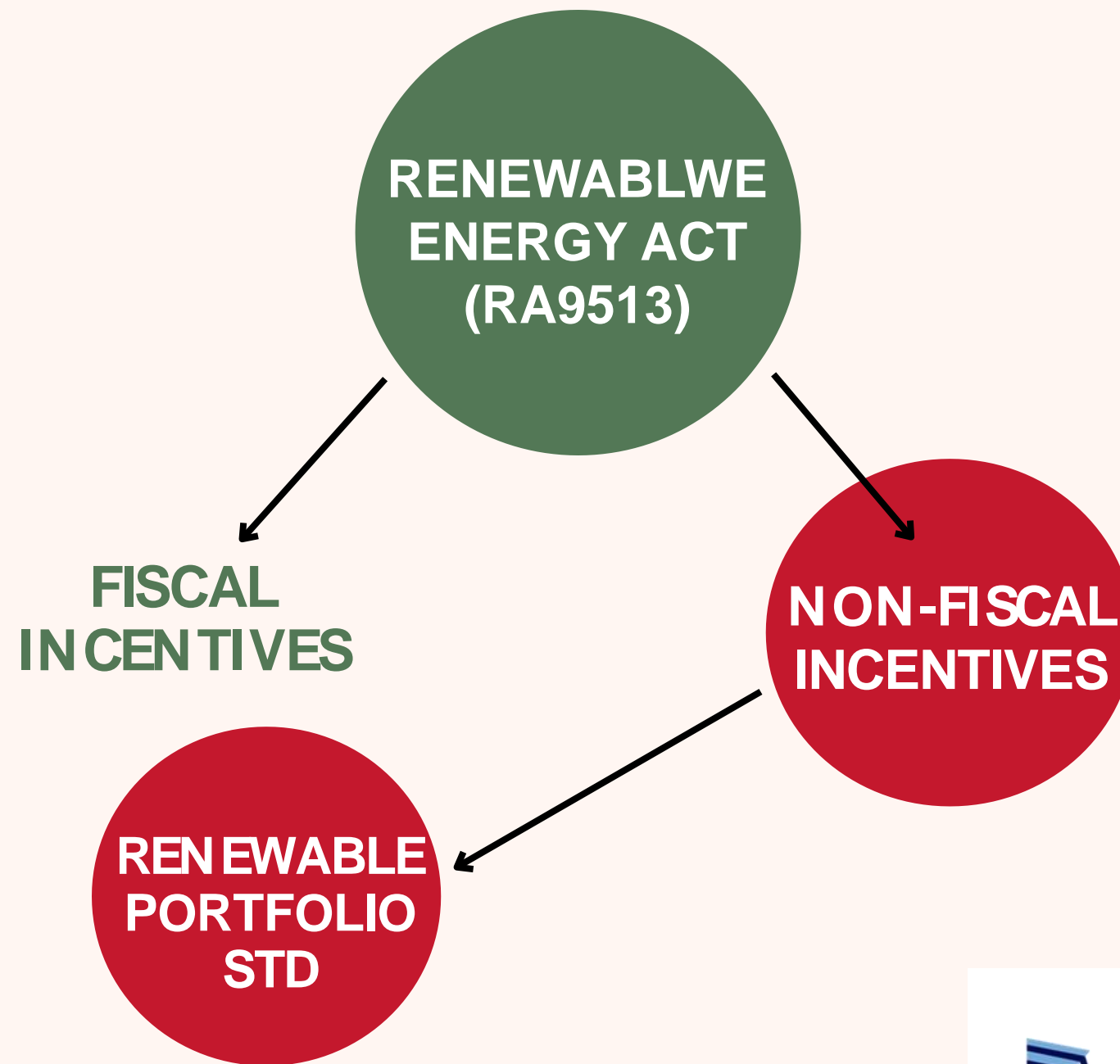




# FISCAL INCENTIVES

| Incentive   | RE Developers | Local RE Suppliers |
|---|---------------|--------------------|
| 7-year Income Tax Holiday                                 | Yes           | Yes                |
| Duty-free Importation                                     | Yes           | Yes                |
| VAT-free Importation                                      | No Tax credit | Yes                |
| Special Realty Tax Rate = 1.5 %                           | Yes           |                    |
| Net Operating Loss Carryover                              | Yes           | Yes                |
| 10% Corporate Tax Rate after ITH                          | Yes           |                    |
| Accelerated Depreciation                                  | Yes           | Yes                |
| Zero Percent VAT on RE Sales & Purchases                  | Yes           | Yes                |
| Cash Incentive = 50% of UC for Missionary Electrification | Yes           |                    |
| Tax Exemption on Carbon Credits                           | Yes           |                    |
| Tax Credit on Domestic Capital Equipment & Services       | Yes           | Yes                |

# INCENTIVES UNDER THE RENEWABLE ENERGY ACT



# RENEWABLE PORTFOLIO STANDARDS (RPS)



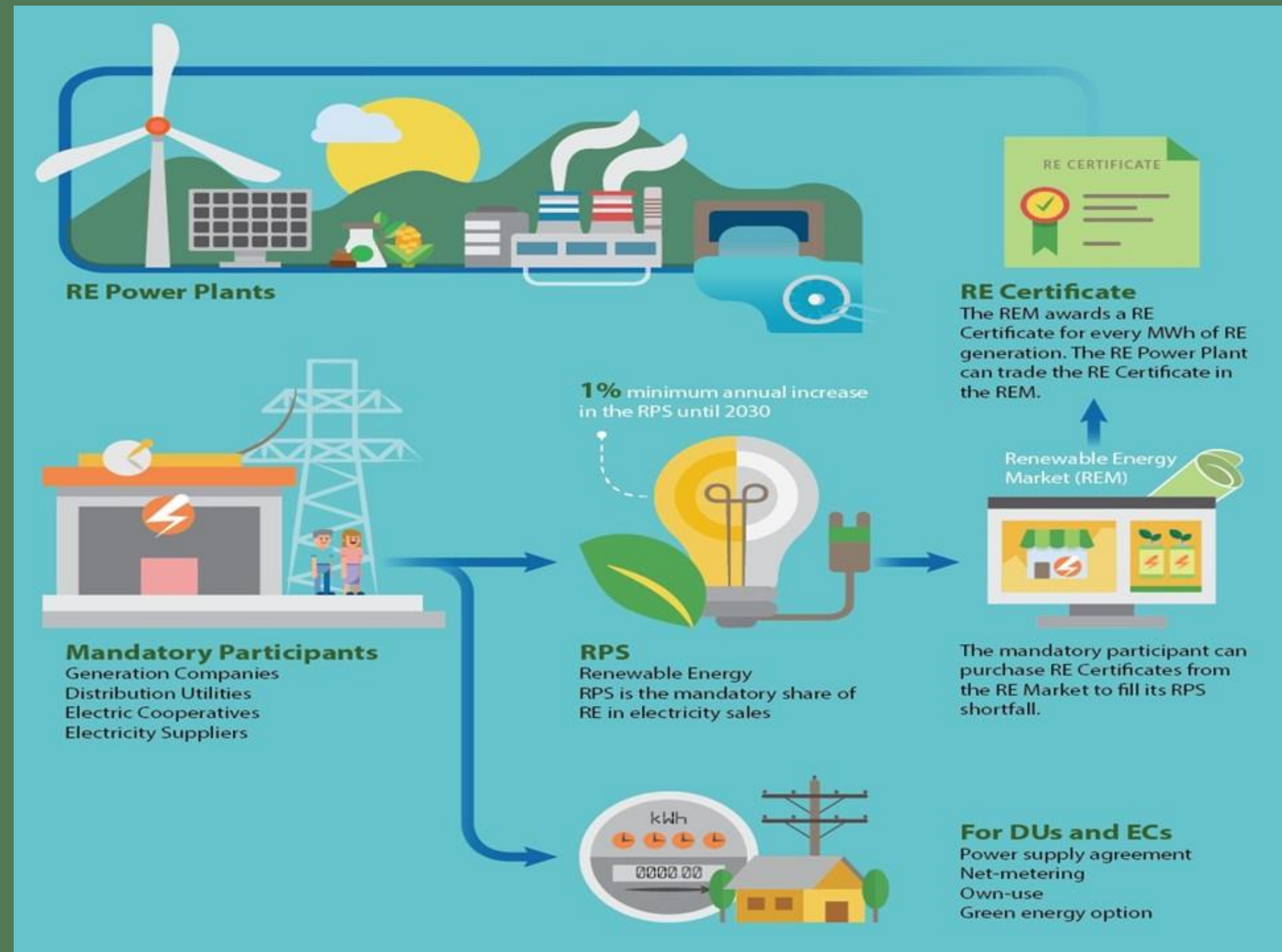
## On-Grid Areas

A mandatory policy requiring a minimum sourcing of RE generation to the total supply of electricity by Load Serving Entities operating in main grids.

The goal is to reach the 35% RE share in the generation mix by 2030.

Currently set at 1% annual increment. NREB has proposed to increase the min. annual increment to 2.53% to achieve the goal of 35% RE Share by 2030.

RPS Composite Team doing simulations including calibrated increases in the annual increments.



# RENEWABLE PORTFOLIO STANDARDS (RPS)

## Off-Grid Areas

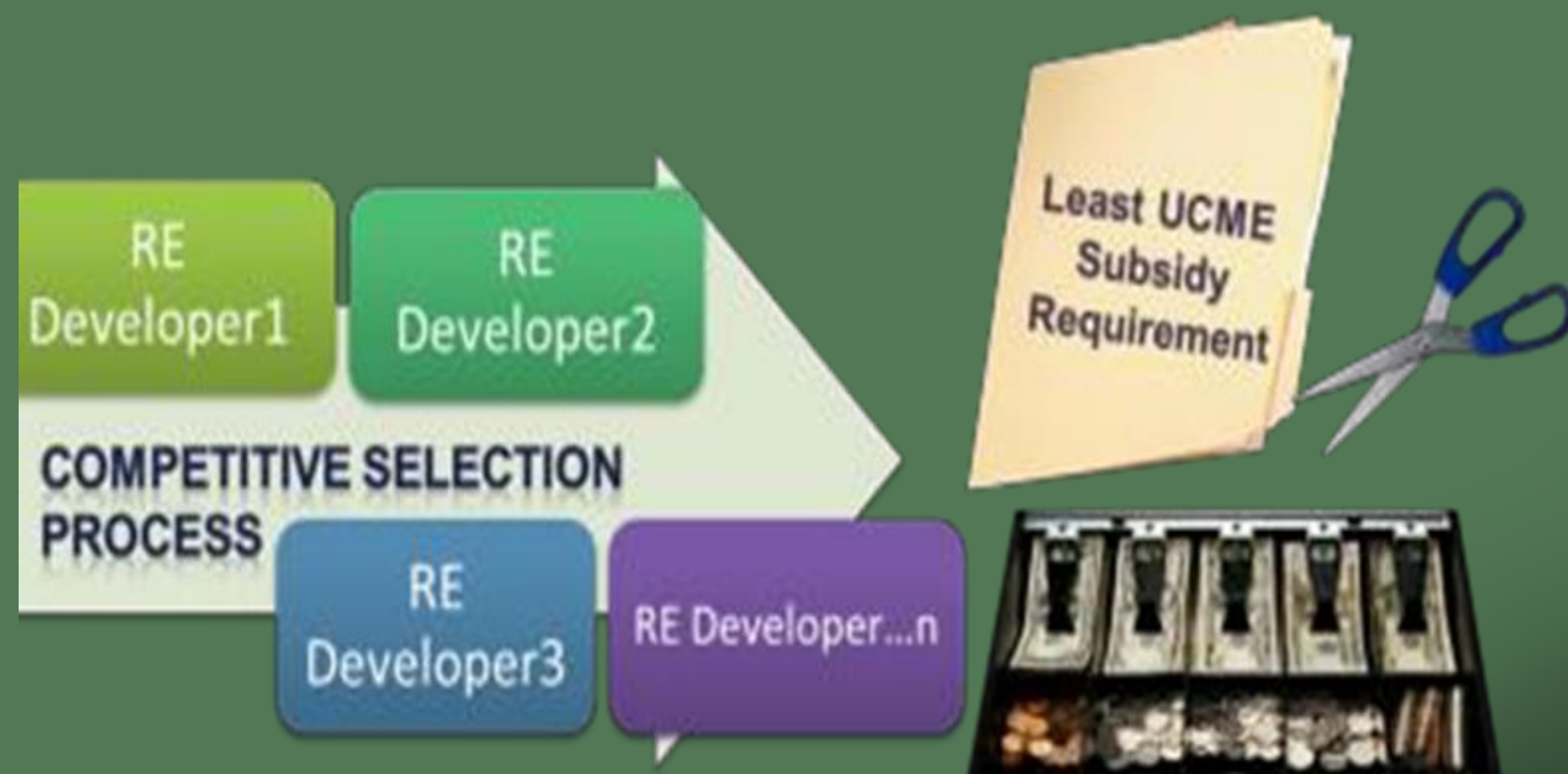
A mandatory policy requiring a minimum sourcing of the total annual generation by power generators in mission areas from available RE resources in the area concerned, based on optimal supply mix.

Capacity Building (online training) on the use of SPT for planning and determination of least cost RPS Compliance Plan options for the Mandated Participants.

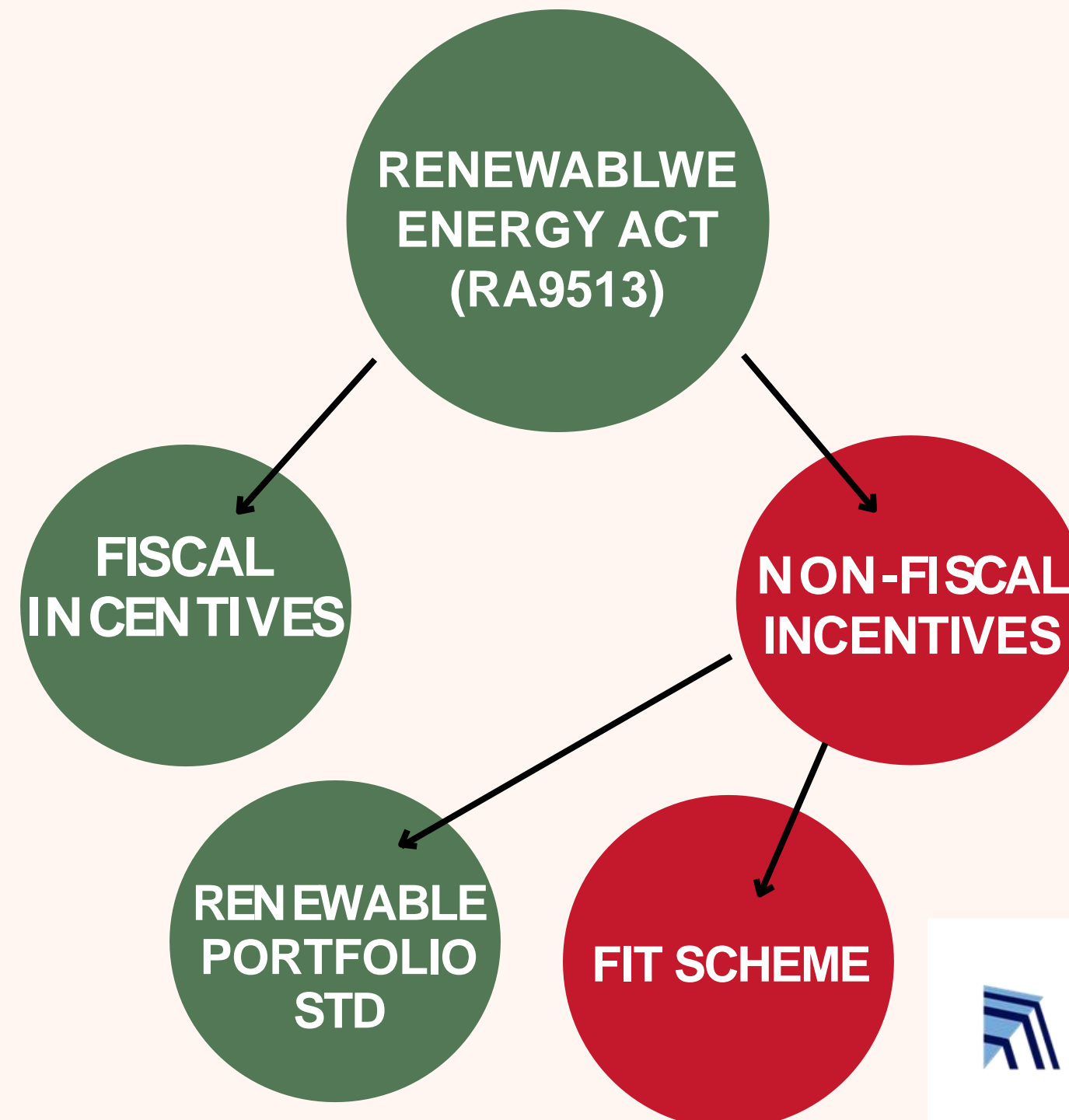
Workshop on Simplified Planning Tool (SPT)

- 26-27 March 2019
- October 2020

Compliance for Year 1 for RPS Off-Grid is suspended until further notice



# INCENTIVES UNDER THE RENEWABLE ENERGY ACT





# BENEFITS OF THE FIT SYSTEM

## *Feed-In Tariff (FIT) System*

### Guaranteed Rates



### Priority Dispatch in the WESM



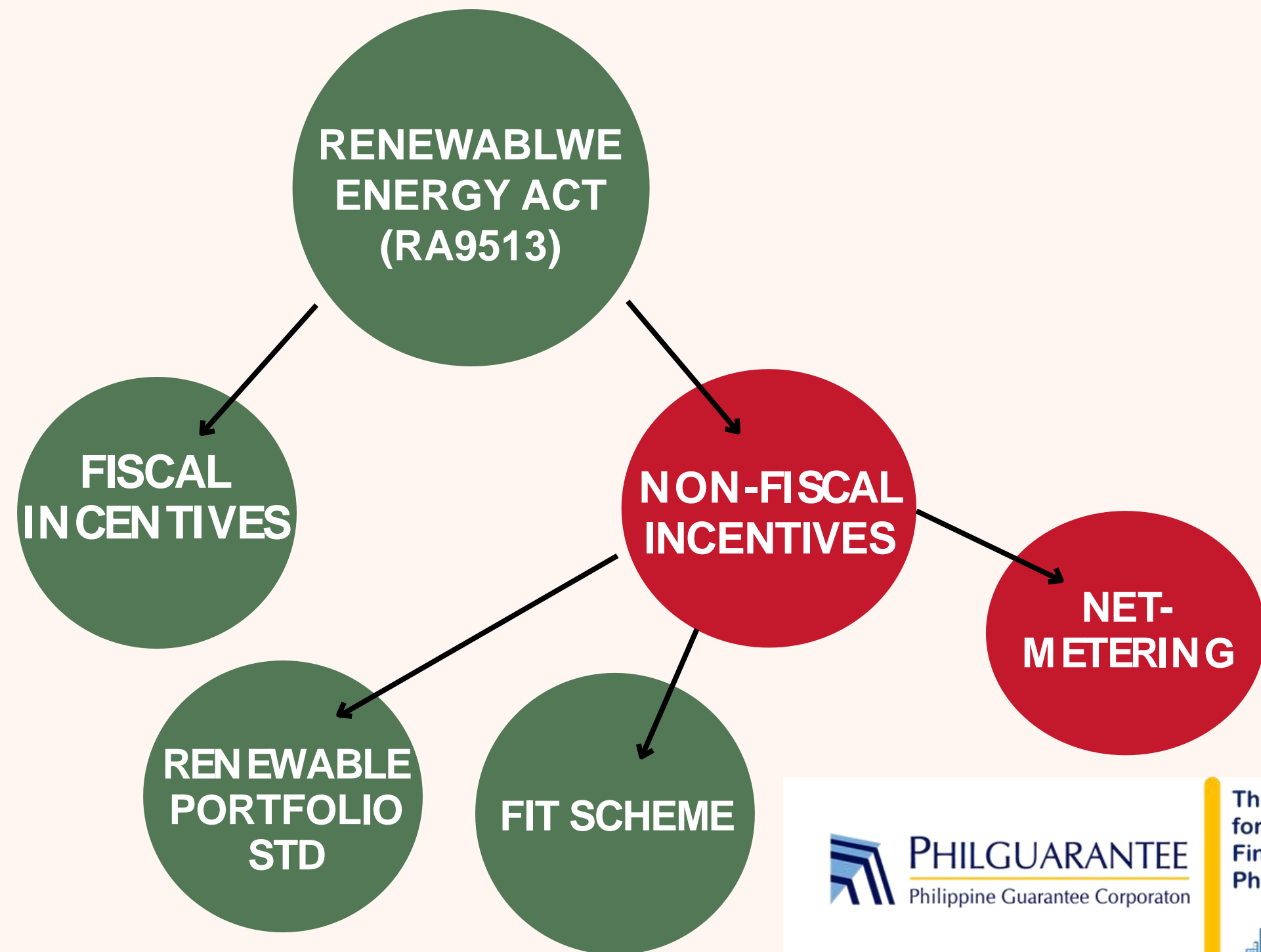
***FIT-All Charges***



***Lower WESM Rates***



# INCENTIVES UNDER THE RENEWABLE ENERGY ACT



# NET METERING

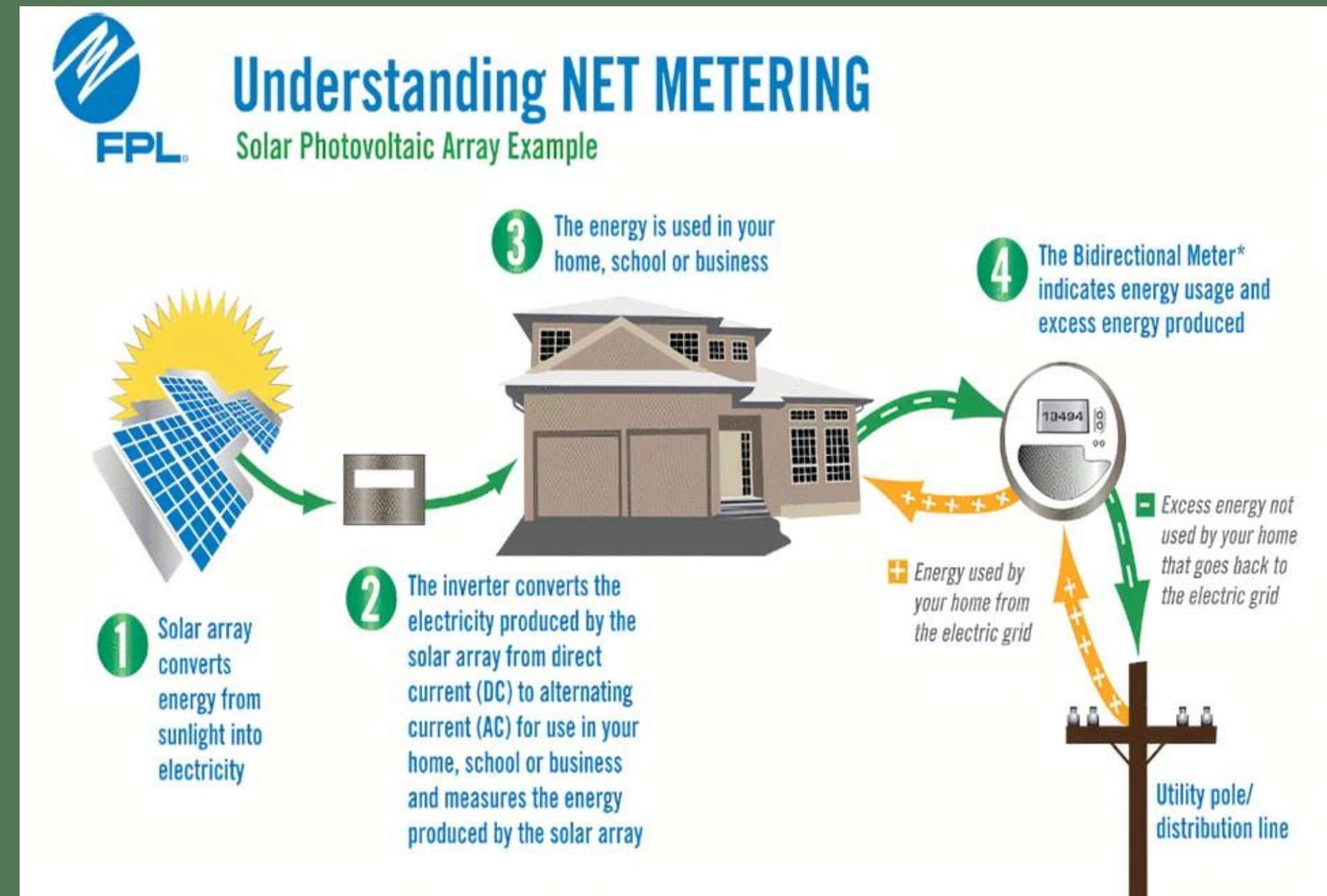
Net-Metering empowers electricity end-users to produce electricity and sell excess to the grid transforming consumers to prosumers.

As of 31 Dec 2020, a total of 3,795 end-users were registered with a total rated capacity of 30.82 MWp.

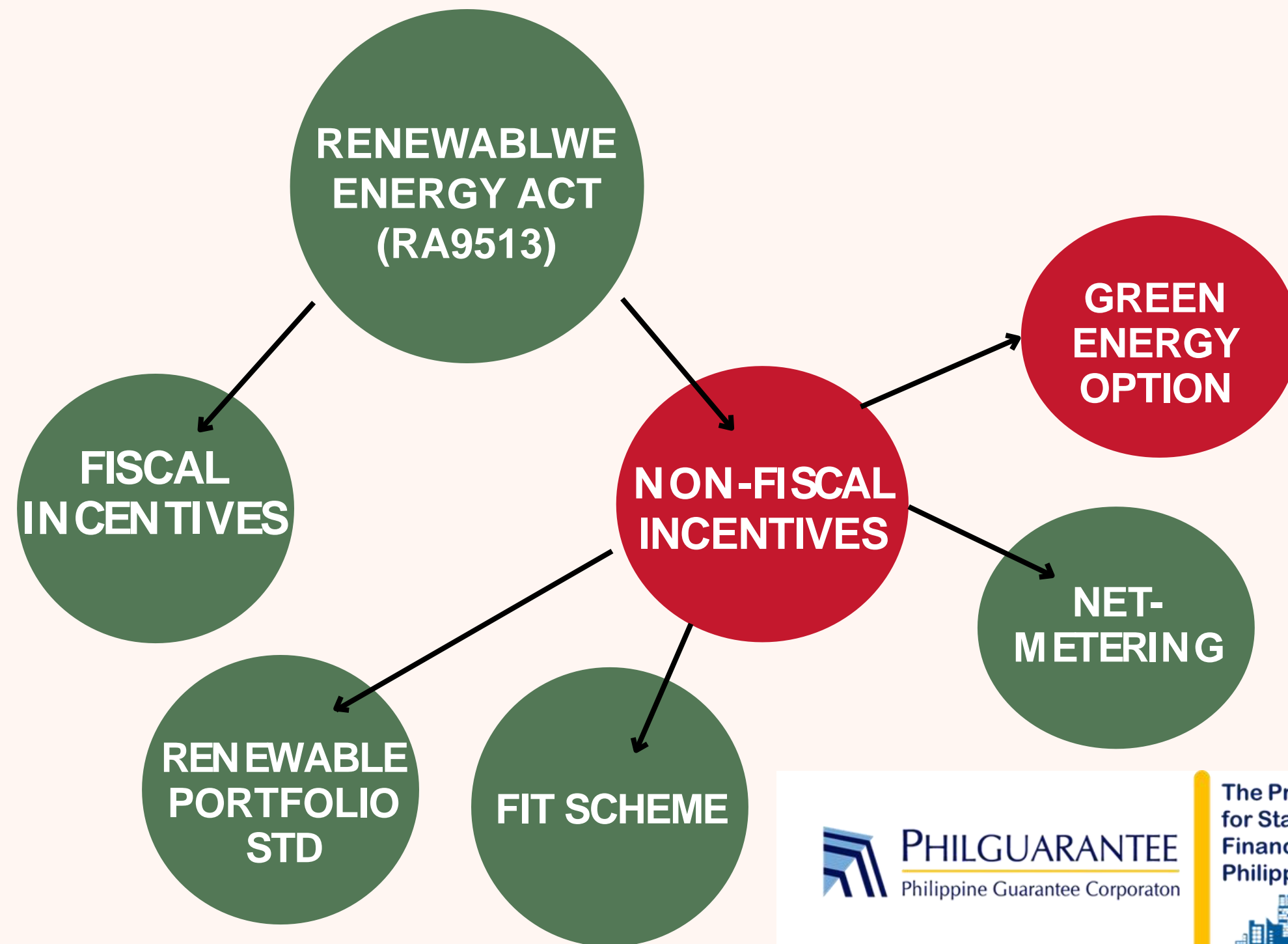
Department Circular No. DC2020-10-0022, "Prescribing the Policies to Enhance the Net-Metering Program for Renewable Energy Systems" promulgated on 22 Oct 2020

Net-Metering will now be open to areas not connected to the national transmission lines

DOE to develop a Net Metering Guidebook v1 - posted in the DOE website



# INCENTIVES UNDER THE RENEWABLE ENERGY ACT

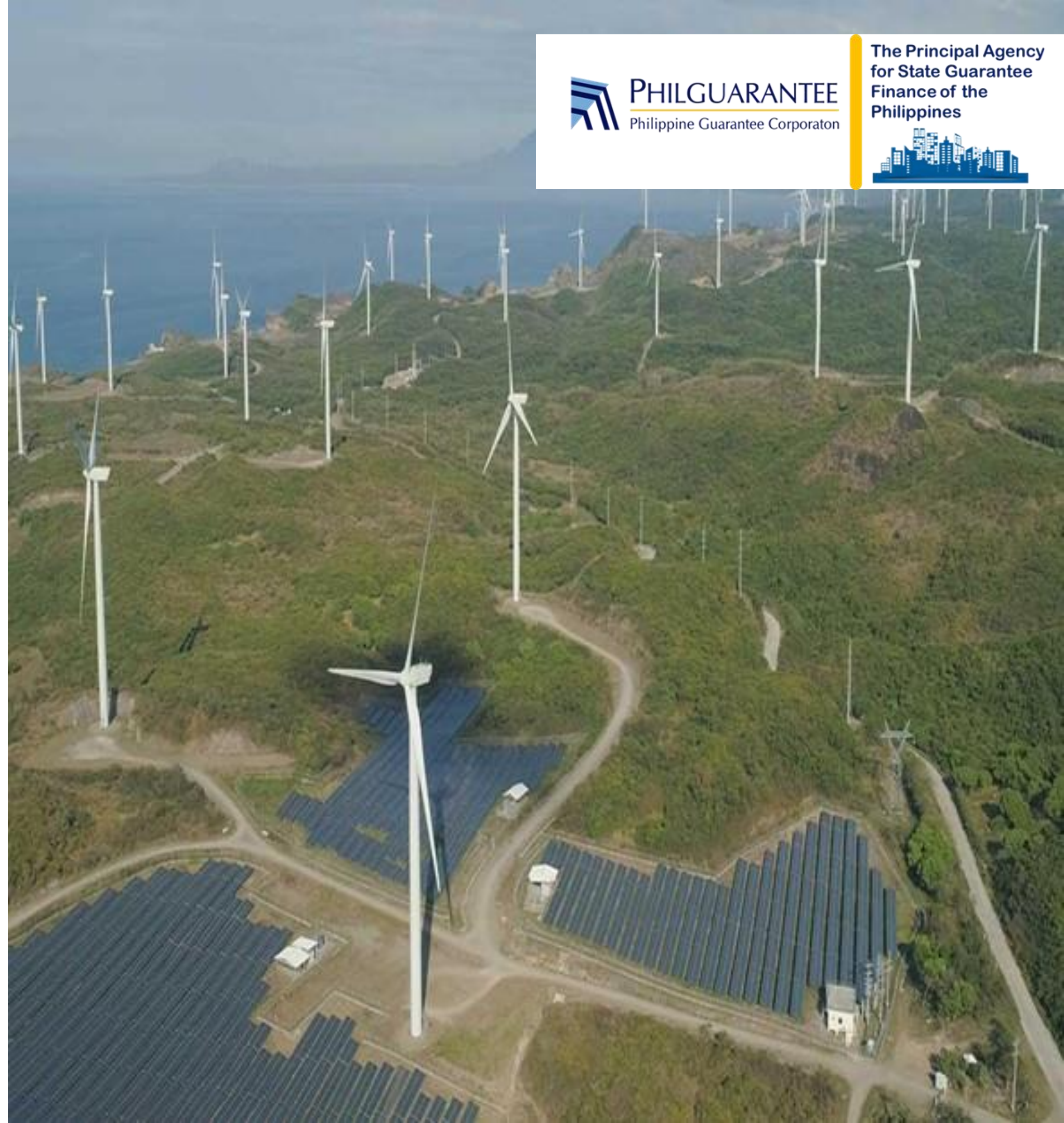


# GREEN ENERGY OPTION PROGRAM (GEOP)

A voluntary policy mechanism that allows end-users with 100 kW and above demand to source their electricity supply from RE resources through RE Suppliers

It is a **non-regulated activity**. An opportunity for end-users to contribute in the development and utilization of RE resources in a least-cost and sustainable manner

Operating Permits issued to 6 RE Suppliers Permit were issued as of 31 March 2021.



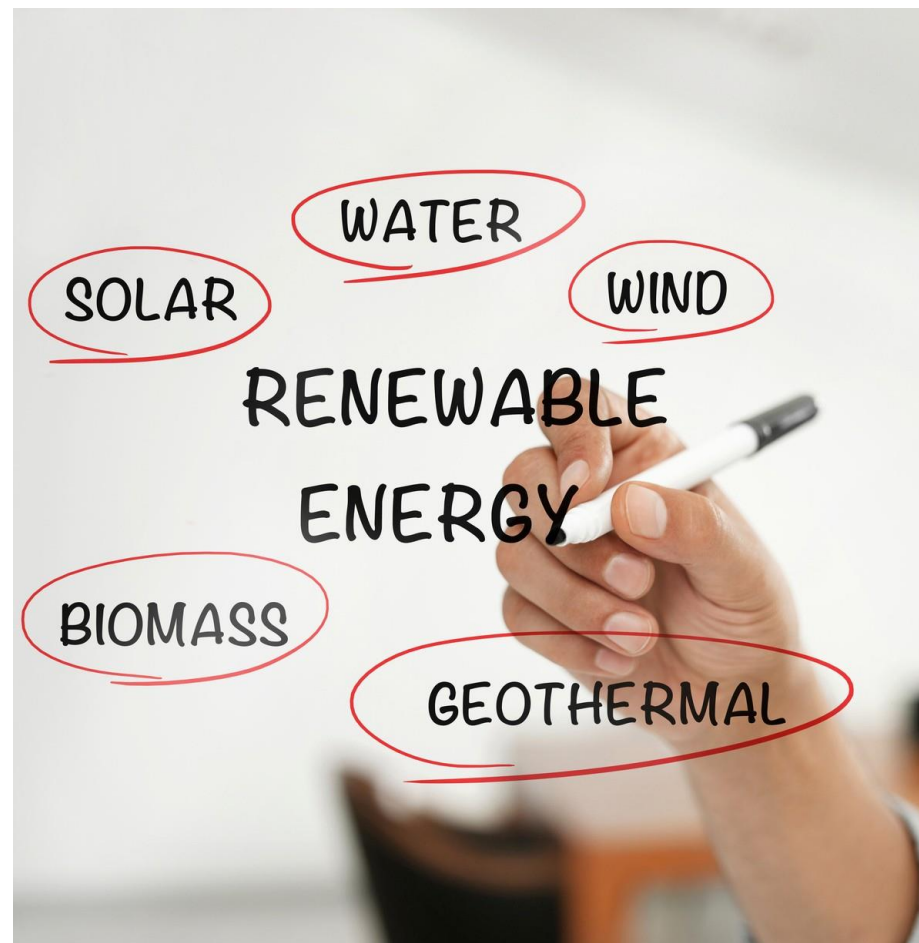
# WHAT WE SHOULD DO



## Generation

---

ADD MORE SUPPLY FROM  
INDIGENOUS RESOURCES



## Transmission and Distribution

---

ADD MORE RESILIENT  
INFRASTRUCTURE



## Supply

---

ENCOURAGE CONSUMERS  
TO HAVE OWN SUPPLY



# PHILGUARANTEE INITIATIVES



## Investment Promotion

---

Provide Sovereign Guarantee as needed to Renewable Energy projects and Industries intending to shift to Energy Efficient Technologies



## Attain energy self-sufficiency

---

Stop providing guarantees to non-renewable energy power plants specially those using or who will use imported fuel



## Creating resilient MSMEs

---

Continue existing Sovereign Guarantee Program to improve resiliency and sustainability of MSMEs



# PHILGUARANTEE INITIATIVES



## Enhancing food security

---

Include investments support through Guarantees to farm owners and entrepreneurs in its KRA



## Infrastructure

---

Support the Infrastructure Programs of Government to improve the investment / business climate and build back better







# RENEWABLE ENERGY PROJECTS GUARANTEED BY PHILGUARANTEE



# Northwind Power Development Corporation

*Wind Farm Facility*



# Imperial Homes Corporation

*Solar-Powered Residential Development*



# FIRST GEN CORPORATION

*Renewable Power Producer*



**PHILGUARANTEE**  
Philippine Guarantee Corporation

The Principal Agency  
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Philippines





# First Philec Solar Power Corporation

*Solar Panel Production*





# NOVOTEL MACTAN

ACP RESORTS HOLDINGS, INC.  
(ACPRHI)

*Tourism*



35th Asian Credit  
Supplementation  
Institution Confederation  
(ACSIC) Conference

Ulaanbaatar,  
Mongolia  
August 6-10,  
2022



The Principal Agency  
for State Guarantee  
Finance of the  
Philippines



# THANK YOU



**OFFICE ADDRESS:** 22ND-24TH FLOOR, BPI-PHILAM BLDG.,  
AYALA AVENUE, MAKATI CITY



[WWW.PHILGUARANTEE.GOV.PH](http://WWW.PHILGUARANTEE.GOV.PH)

# EXPERT INSIGHT DISCUSSION 3

## Navigating the Green Transition: Unleashing Sustainable Development through Blended Finance





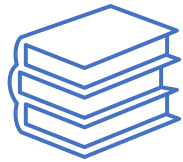
Ulaanbaatar Mongolia, August 09, 2023

# **Navigating the Green Transition: Unleashing Sustainable Development through Blended Finance**

Samuil Shiderov

Blended finance expert  
BRH, UNDP





1. [Introduction](#)
2. [Shifting finance towards the SDGs](#)
3. [UNDP 1 trillion “moonshot”](#)
4. [UNDP Sustainable finance services](#)
5. [What is Blended Finance](#)
6. [How Blended Finance mobilize resources](#)
7. [When to use Blended Finance](#)
8. [Blended Finance- market overview](#)

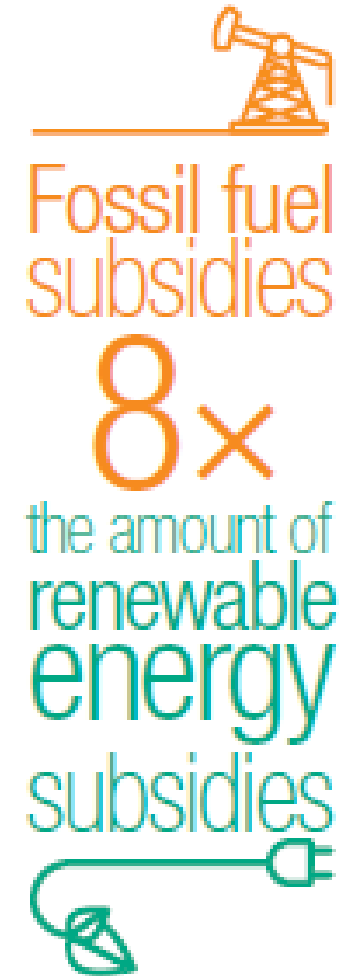
# 1. Introduction

“Fossil fuel subsidies around the world amounted to **\$1 trillion in 2022** – a record level, and **eight times the value of subsidies provided to renewable energy**”

*World Investment Report 2023 Investing in sustainable energy for all*

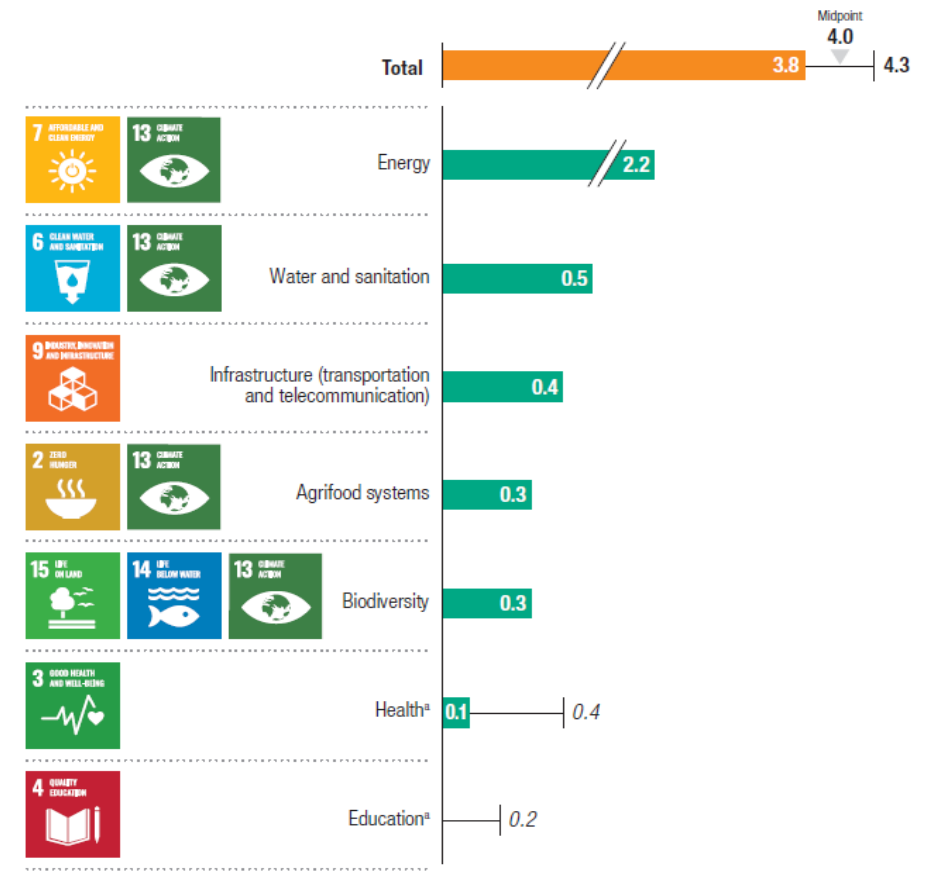
“ ... a renewable energy plant generates electricity but also abates GHG emissions, the latter being beneficial to society. Because companies are not capturing these additional benefits, it may cause the economy to deliver an outcome that is suboptimal, in our example, less renewable energy generation. **Corrective subsidies can be designed to rectify such an unsatisfactory outcome**, by increasing the production and the consumption of a targeted good or service. **We will consider blended finance to be a subset of a corrective subsidy.**”

*IDB Invest A Strategic Approach to Blended Finance 2023*



# 1. Introduction

- Largest gaps in SDGs-related investments in developing countries: **energy, water, and transport infrastructure**.
- Developing countries face an **investment gap of \$2.2 trillion annually for the energy transition**, more than half of the **\$4 trillion** funding gap for the #SDGs.
- **FDI significantly contributes to financing renewable energy projects**, as nearly half of global investments involve foreign sponsors or equity investors, constituting **55% of the total investment value in renewables**.

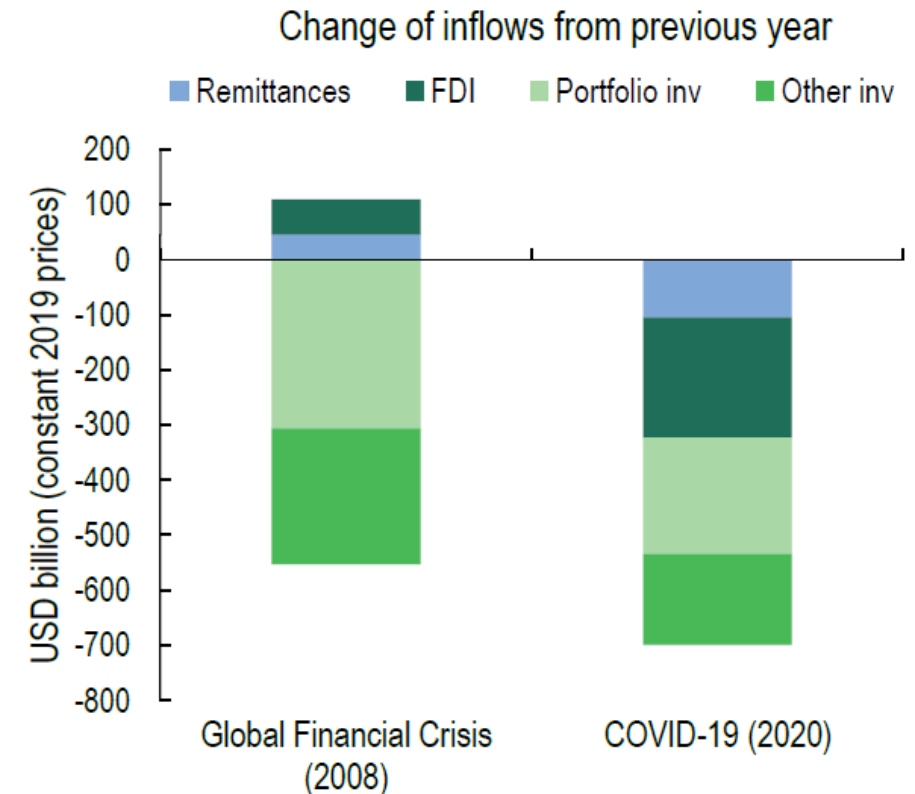


Source: UNCTAD (forthcoming).

\* Source: UNCTAD report July 2023 <https://news.un.org/en/story/2023/07/1138352>

# 1. Introduction

- In 2020, global FDI flows dropped by one in three to \$1 trillion, which is the lowest point since the financial crisis in 2008.
- The COVID-19 crisis **highlighted the importance of aligning our economies to the SDGs** and the Paris Agreement for building resilience.
- In 2022, global FDI flows **fell again by 22% due to polycrisis** - war in Ukraine, high food and energy prices, debt pressures.
- **FDI in clean energy for developing countries** in 2022 was \$544 billion, significantly below needs.

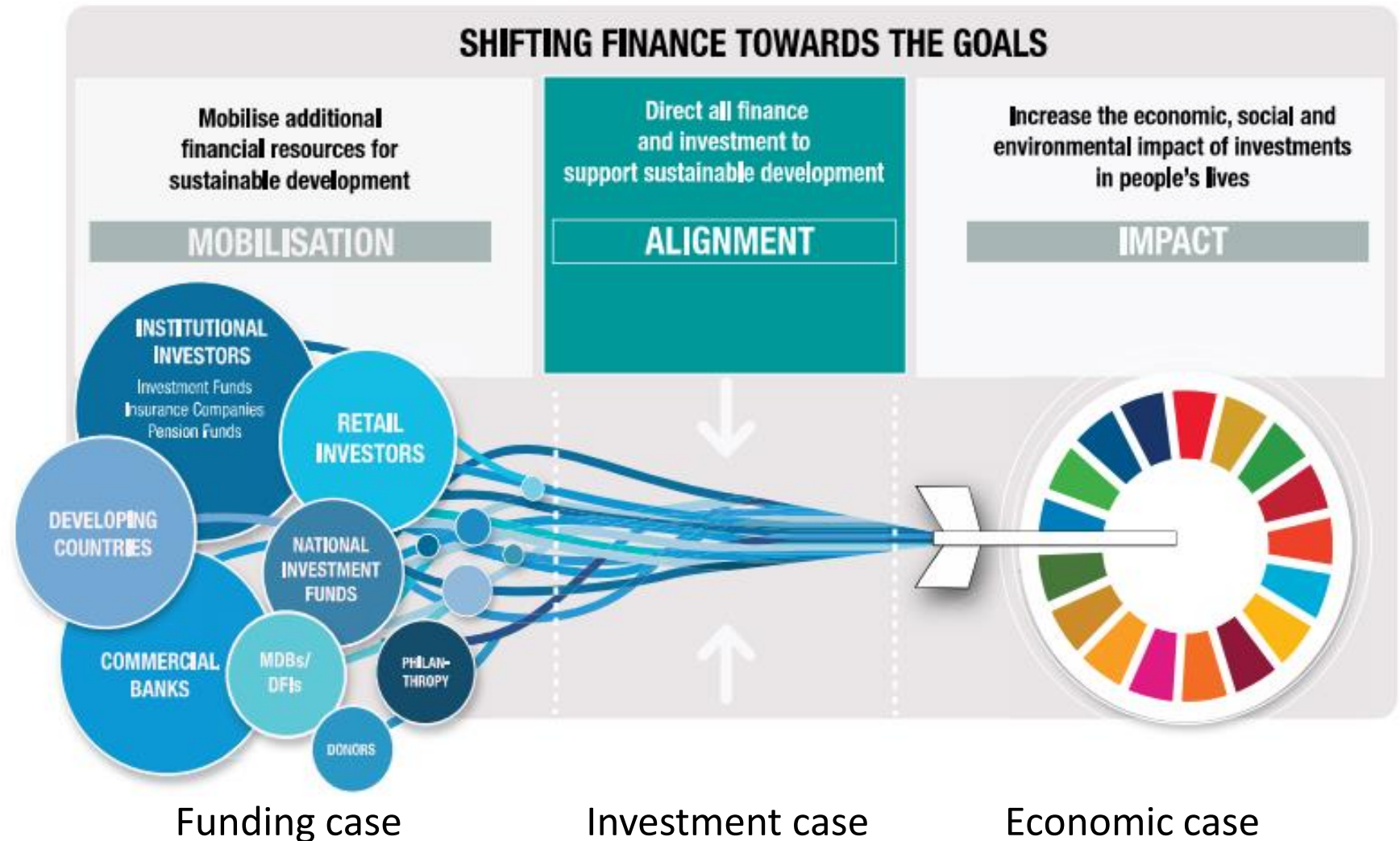


Source: Framework for SDG Aligned Finance © OECD, UNDP 2020

# 2. Shifting finance towards the SDGs

A three-step approach to shifting finance towards the SDGs

- 1. Funding case –**  
Mobilization (unlock the volumes of finance)
- 2. Investment case–**  
Alignment (mitigating systemic risks)
- 3. Economic case –** Impact  
(incorporating SDG into business strategies)



# 3. UNDP 1 trillion “moonshot”

## EXAMPLE:

## US\$ X billion moonshot (2022-2025)

**DRAFT EXAMPLE:** UNDP \_\_\_\_\_ will contribute to the alignment and leverage of US\$ XX billion in risk-informed and climate-resilient public and private financing for the SDGs and NDCs

### ALIGNMENT *(Generating enhanced impacts from existing sources of public or private finance for the SDGs)*

#### \$ billion public finance

- \$ billion public expenditure aligned with the SDGs (SDG Budget coding and tracking leading to SDG responsive budgeting framework).
- \$ billion aligned through tax policies, tax systems (tax expenditures reviewed against the SDG taxation framework)

#### \$ billion private capital

- \$ billion aligned with the SDGs through sustainable finance taxonomies; policy and regulatory frameworks and required disclosure

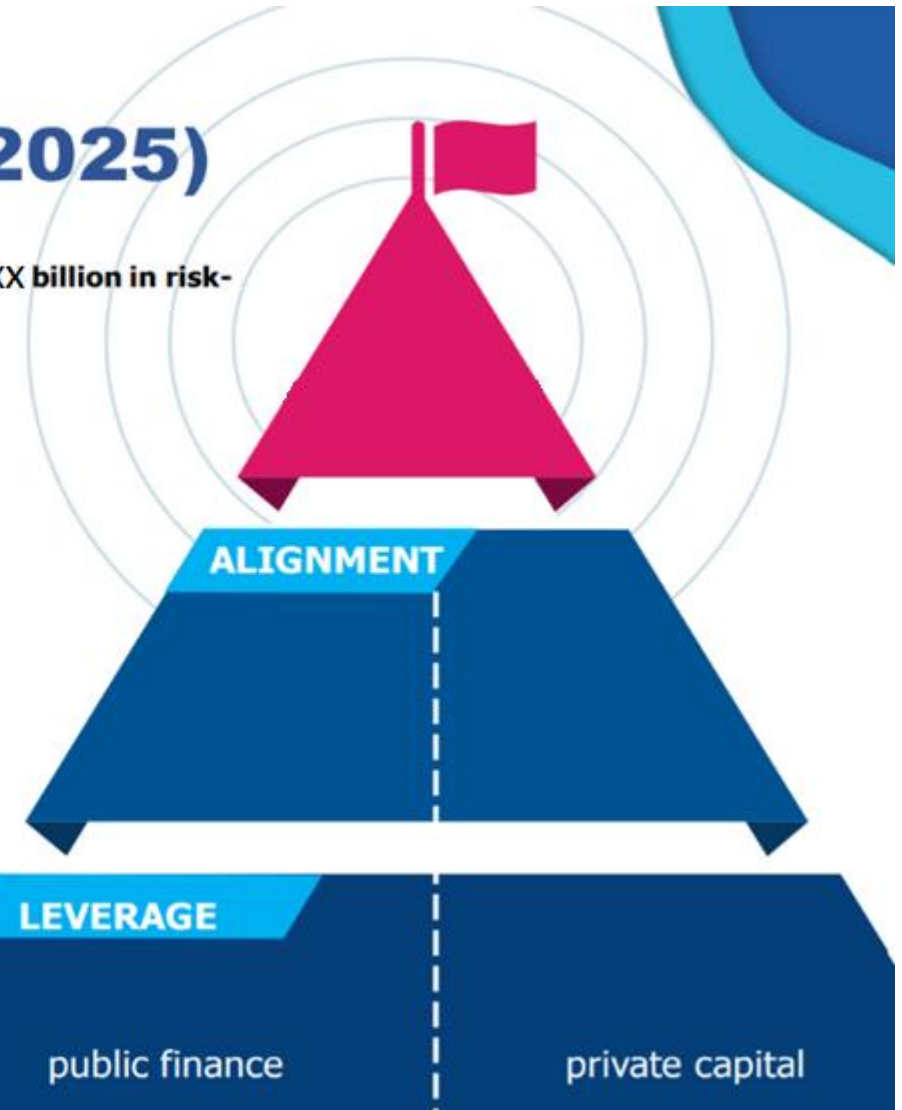
### LEVERAGE *(Generating new resources from public or private entities that are invested in the SDGs )*

#### \$ billion public finance

- \$ billion SDG debt instruments (public and private)

#### \$ million private capital

- \$ million blended finance



*In 2023 at least 50 Country Offices will develop their moonshots and a corresponding narrative, telling the story behind the numbers.*

# 4. UNDP Sustainable finance services

## Integrated National Financing Frameworks (INFFs)

Building country-led sustainable finance architecture, including the delivery of risk-informed national financing strategies

## Public Finance for the SDGs

Aligning public finance with the SDGs, whether to specific SDGs or across the entire SDG agenda, through SDG budgeting and SDG-aligned debt instruments

## UNDP SUSTAINABLE FINANCE HUB SERVICES

## Impact Management and Finance Tracking

Scaling the integrity, accountability and transparency of the planned and actual impact of investments by ensuring consistent impact reporting practices and building impact measurement and management capabilities

## Aligning Private Capital

Originating an SDG investment project pipeline and aligning business operations for the SDGs to unlock private capital

**UNDP established the Sustainable Finance Hub (SFH) in April 2019.**

UNDP works with multiple partners to realize a sustainable finance architecture and calls on its partners to join UNDP in its \$1 trillion 'Moonshot' target to help mobilise game-changing public and private sector resources towards the SDGs.

**Sustainable finance service offers (4+1)**

- INFFs and portfolios
- Public finance
- Unlocking private capital and aligning business operations for the SDGs (including **Blended Finance**)
- SDG impact management & finance tracking
- SDG Finance academy



# 5. What is Blended Finance?

**Blended finance** is the strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries.

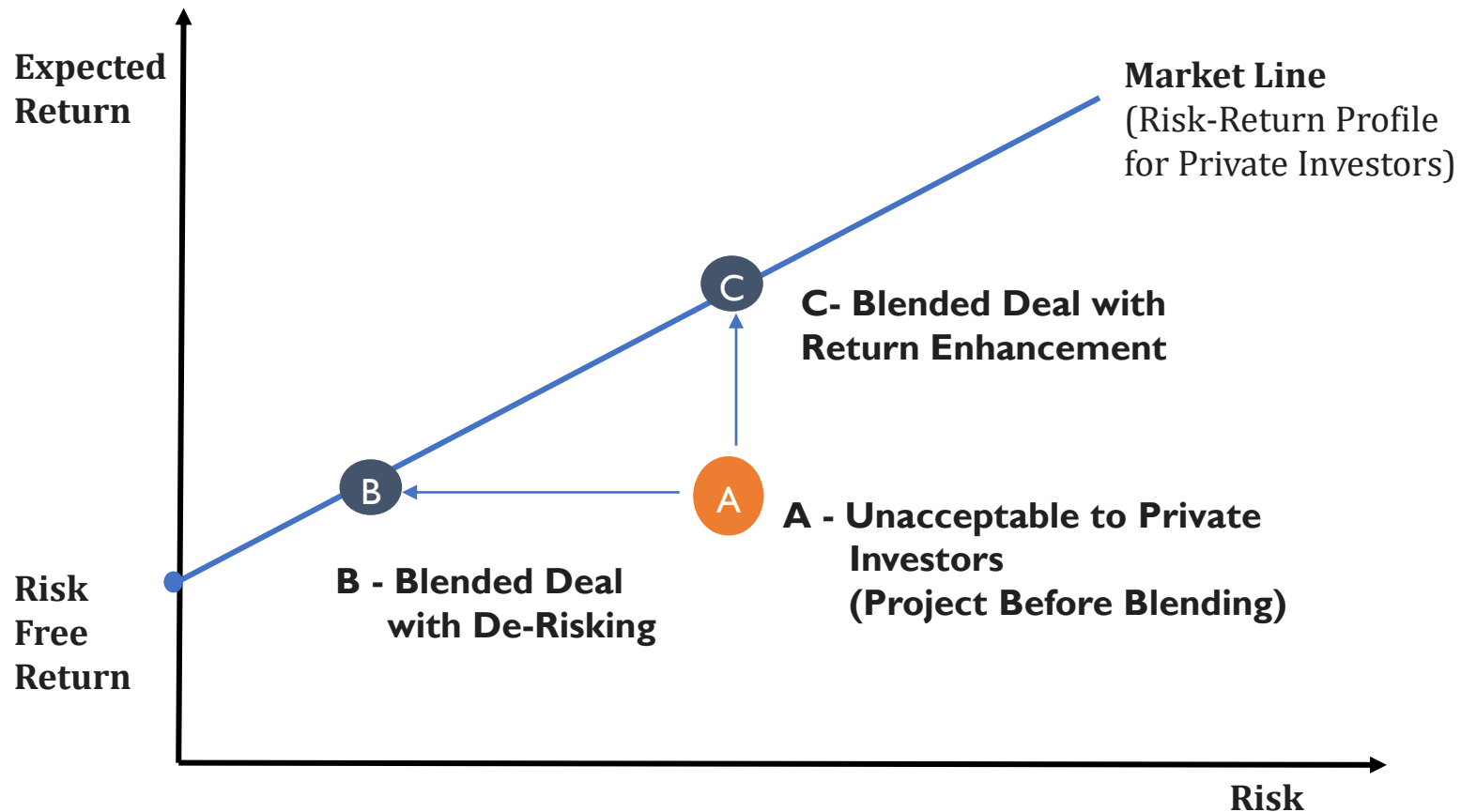


## Structuring approach

- 1. Financial Sources:** Requires both non-concessional and concessional sources (levels of concessionality and leverage).
- 2. Financing Structure:** instrument (debt, equity, risk mitigation, grant), type (company, facility, project, fund, bond), risk sharing (asymmetric or symmetric)
- 3. Use of Finance:** to support developing countries in achieving social, economic, and environmentally sustainable development.

# 6. How Blended Finance mobilize resources?

Blended finance can adjust an investment's risk-return profile by **de-risking** or **risk enhancement** instruments.



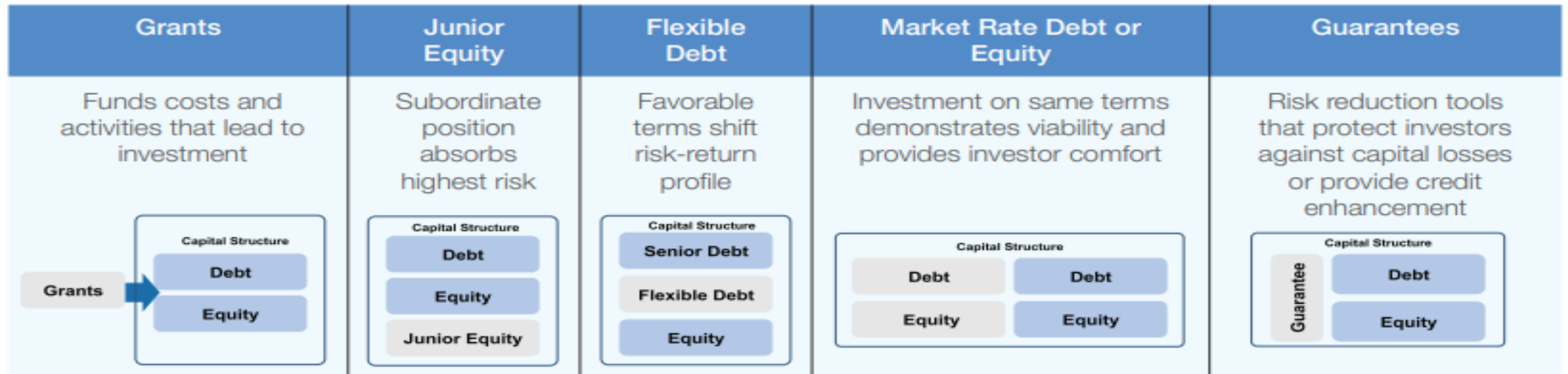
- Blended Finance** is a **structuring** approach
- Impact Investment** - strategic approach to **investing** in the projects that assume impact targeting
- Public private partnerships - contracting** approach; may or may not contain concessionality

# 7. When to use Blended Finance

In the presence of both **financial** and **development** additionality. “**Financial additionality** refers to situations, where finance is mobilised and an investment is made that would not have materialised otherwise”.

Source: OECD Blended Finance Evaluation: Governance and Methodological Challenges

## What are the blended finance archetypes?



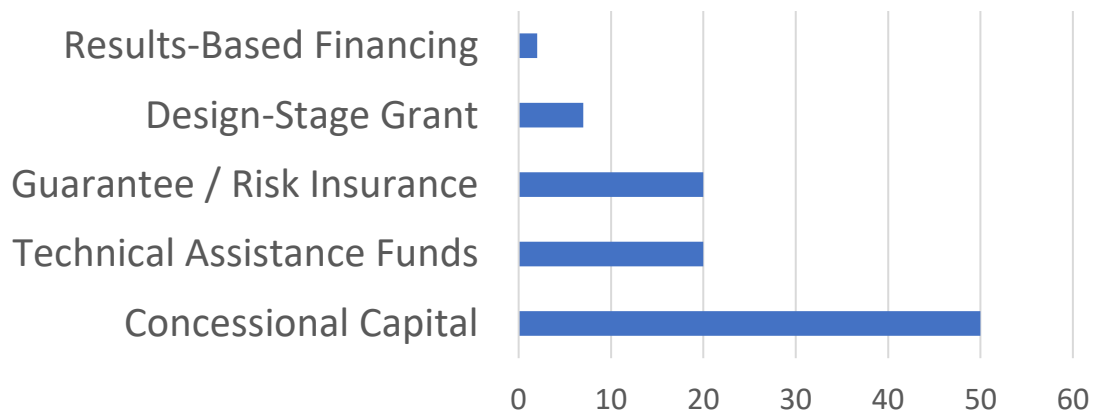
Source: World Economic Forum - Blended Finance in the Private Sector Context

# 8. Blended Finance - market overview

In 2022 there were **759 transactions** closed for the total amount of **USD 169.5 bn** (Source: Convergence database)\*.

Up to date, **concessional debt or equity** has been the most common archetype, including first-loss debt or equity (50% of the transactions)

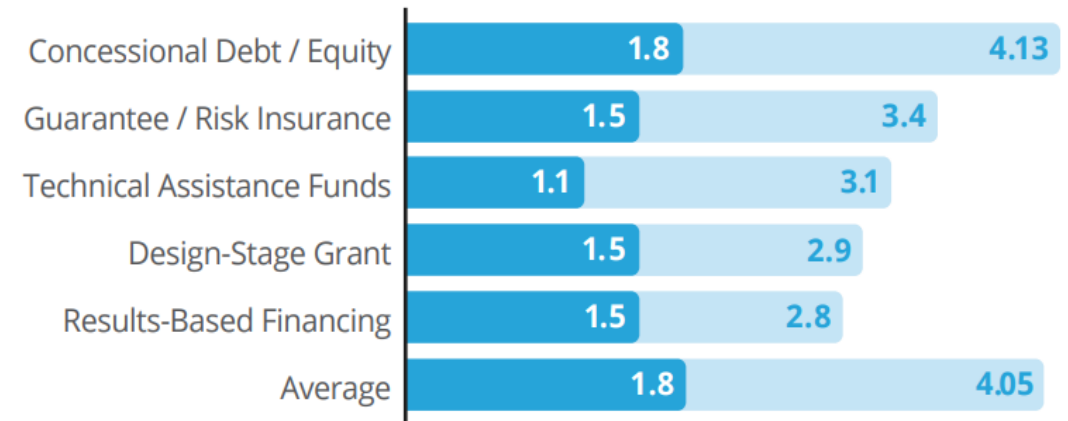
Blending Archetypes %



**Concessional debt/equity and guarantees** serve as potent tools that yield a higher leverage ratio (projects in advanced stages).

**Results-based financing** and design-stage grants operate with more restricted revenue sources, consequently leading to lower leverage ratios.

Average Leverage ratios



Average leverage ratios (light blue) and private sector mobilization ratios (dark blue).

\*<https://www.convergence.finance/>

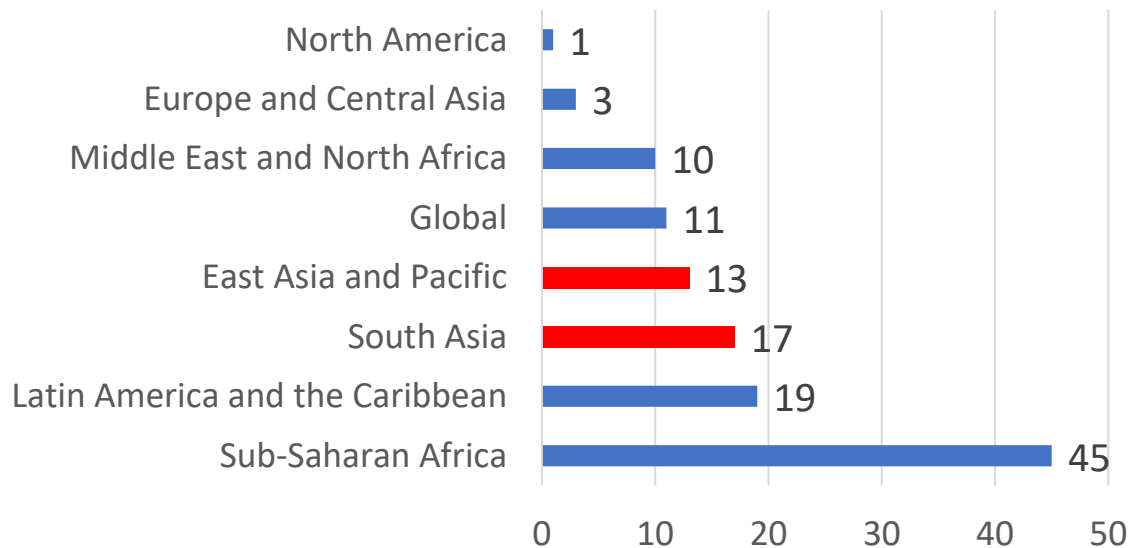
# 8. Blended Finance- market overview

**Sub-Saharan Africa** has been the most frequently targeted region in blended finance transactions.

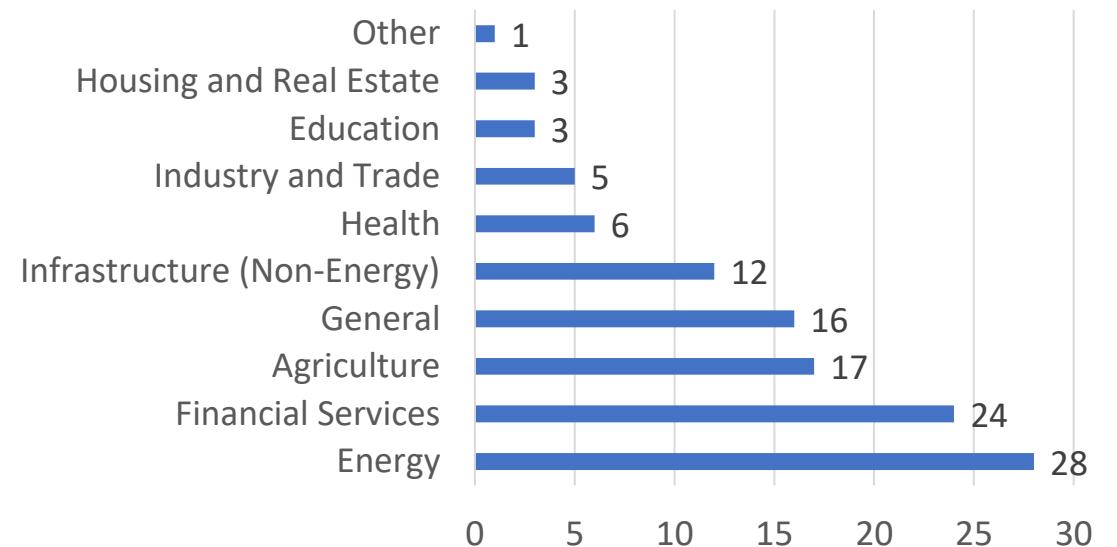
**Asia and Latin America emerge as new frontiers for blended finance** in recent years\*.

**Energy** stands out as the sector most commonly addressed in blended finance transactions, constituting a significant 28% share of the total transaction volume.

Blended finance transactions by region (%)



Blended finance transactions by sector (%)



\*Source: Convergence database



UN  
DP

# Thank you

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