



## DECARBONIZATION OF SMALL AND MEDIUM INDUSTRIES (SMIs) IN INDONESIA

Presented by:  
Centre for Green Industry

Webinar on the Decarbonization Opportunities of Small-to-Medium Enterprises (SMEs) in Indonesia and Lesson Learnt from Global Experience, IESR – March 14, 2024

# THE URGENCY OF INDUSTRIAL DECARBONIZATION

## Triple Planetary Crisis

Tiga krisis planet yang harus dihadapi oleh seluruh umat manusia, yaitu perubahan iklim, hilangnya keanekaragaman hayati, serta polusi dan limbah.



## Kerentanan Pasokan Bahan Baku dan Energi

Adanya kerentanan akibat iklim dan bencana yang mengakibatkan gagal panen dan krisis air yang mengganggu pasokan bahan baku industri.



## Carbon Exchange (IDXC) & Carbon Trading

Menggeliatnya pasar karbon dan Pasar modal yang mengadopsi aspek keberlanjutan terutama dekarbonisasi melalui instrumen SPE, ESG, SBTi, ClimatePlus, RE100, REC, CE100, dll.



## Green Lifestyle

Kebutuhan pasar atas produk hijau terus meningkat seiring kesadaran dari konsumen untuk menggunakan produk yang rendah karbon.



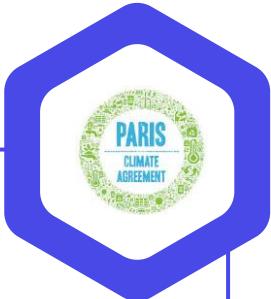
## New Green or Carbon Protection Policy

Adanya regulasi negara tujuan ekspor yang mewajibkan praktik berkelanjutan seperti CBAM (Carbon Boarder Adjustment Mechanism) dan EUDR (EU Deforestation Regulation, dll)



## International Convention

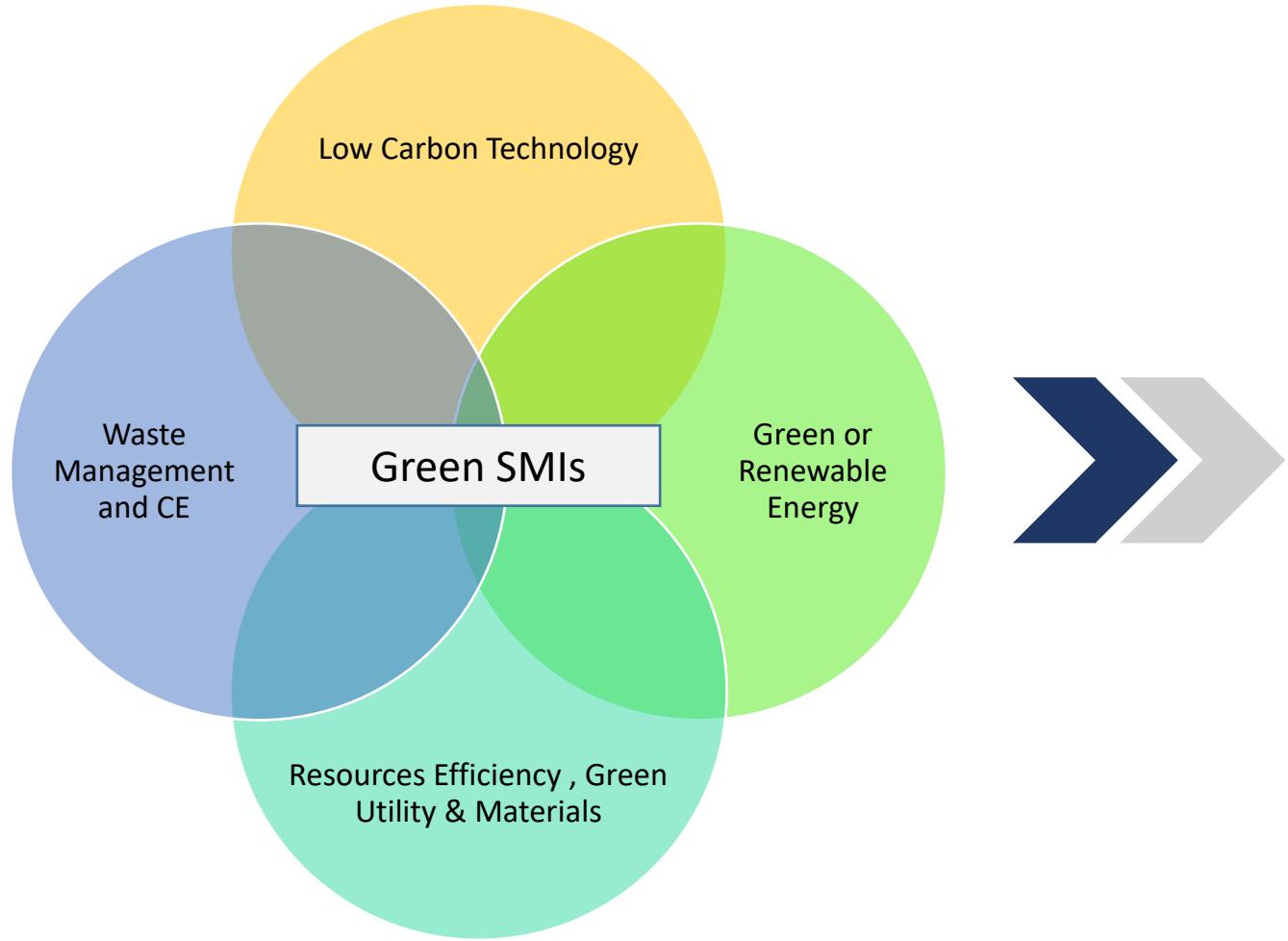
Kontribusi terhadap komitmen negara dalam konvensi internasional (Persetujuan Paris, Konvensi Stockholm)



# Challenges on Industrial Development

Industrial Development	SMIs Development	Green Jobs and Green Professional
<p>1. <b>Decrease of GDP manufacturing:</b> from 32,0% (2002) to 18,3% (2022)</p> <p>2. <b>Labor Productivity:</b> dimana produktivitas TK Indonesia tahun 2020 setara dengan produktivitas TK Jepang di tahun1960-an (APO, 2022)</p> <p>3. <b>Complexity on Competitiveness:</b> industri pengolahan semakin kehilangan daya saingnya di pasar global padahal Malaysia dan Thailand semakin bergerak ke arah ekspor produk knowledge intensive (Basri, 2023; , 2021)</p> <p>4. <b>Technology Adaptation,</b> sementara TK di industri pengolahan masih didominasi oleh unskilled labour (89,3%, 2022) dan hanya 18,6% lulusan pendidikan tinggi yg berasal dari program STEAM (BPS, 2022; WEF, 2020; WB, 2017)</p> <p>5. <b>Mismatched product vs global market demand:</b> contoh untuk produk HS 85, Indonesia mengekspor produk yang permintaannya melambat dalam 5 tahun terakhir (Trademap, 2023)</p> <p>6. <b>Lack of Innovation Capability,</b> dalam Global Innovation Index tahun 2022, Indonesia</p>	<p>1. Financial Support</p> <p>2. Quality and Standardization</p> <p>3. Digital Transformation</p> <p>4. Technological Adaptation</p> <p>5. Market access</p> <p>6. Pressure of Imported Goods</p> <p>7. Process efficiency and operational productivity</p>	<p>1. Limited of understanding of green jobs</p> <p>2. Limited data and information regarding the green job market</p> <p>3. There is no integration of policies and regulations related to green jobs</p> <p>4. The vocational education and training system is inadequate in preparing a green workforce</p> <p>5. Insufficient access to funding and incentives in the development of green jobs</p> <p>6. Limited guidelines and models for developing green jobs at both national and regional levels</p> <p>7. The role of the business entities, the Industries and universities are still weak in developing green jobs.</p>

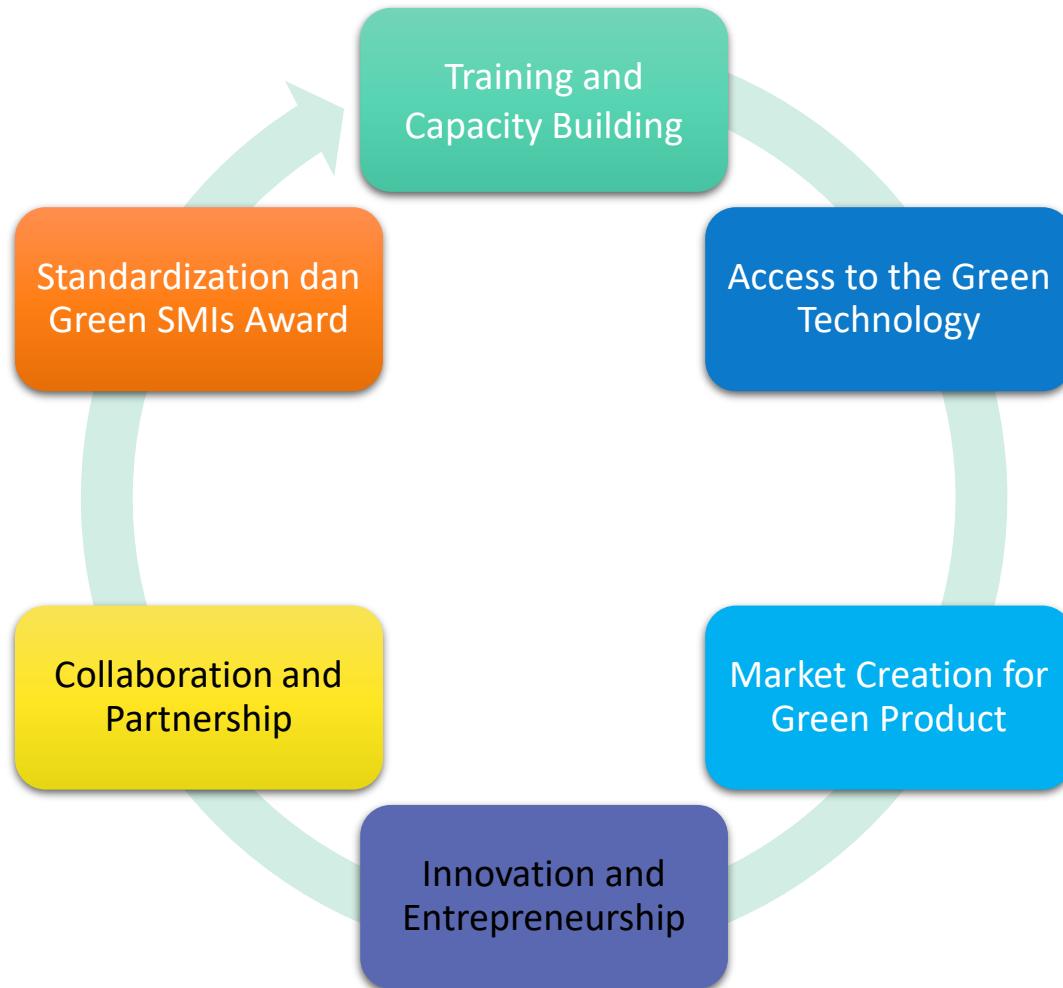
# CO-BENEFITS OF DECARBONIZATION



## 5 economic co benefit for SMIs

- 01 Efisiensi Sumber Daya dan Penghematan Biaya Produksi (**Cost Saving**)
- 02 Market Access and Green Market
- 03 Access of **Green Financing** and Sustainable Investment
- 04 Minimise for Carbon Tax and Revenue from **Carbon Pricing**
- 04 Govt Facilitation or **Incentives**

# Transforming SMIs toward Green Economy



# Enhancing Green Industry Ecosystem



PEOPLE



PLANET



PROFIT



PROSPERITY

Product Competitiveness

CE and Resources Efficiency

Energy Transition, Decarbonization and Net Zero Economy



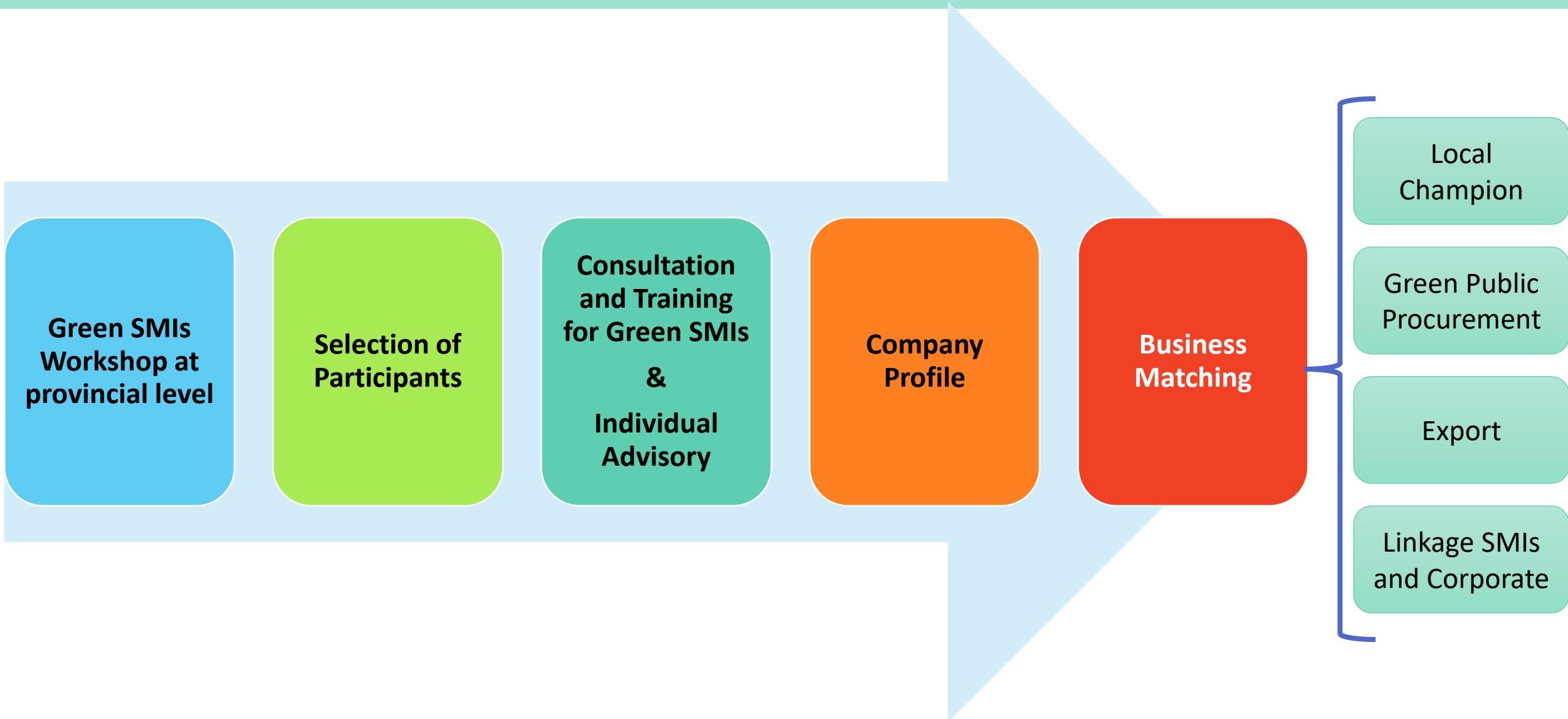
Standar dan Sertifikasi Industri Hijau

Green Procurement	BMP dalam TKDN	IKN Green City	Eksport dan Safeguarding (CBAM & EUDR)	Industri Prioritas
	 <b>TKDN</b> Kementerian Perindustrian Republik Indonesia TINGKAT KOMPONEN DALAM NEGERI			
<p>SIH untuk Pengadaan Barang/Jasa Publik Berkelanjutan (Green Public Procurement) spt: batik, alas kaki, alat perkantoran, kertas, dst.</p> <p>Kemudian akan dilanjutkan dg Green Corporate Procurement (GCP) atau Green Purchasing (GP).</p>	<p>Pemenuhan nilai minimal kewajiban penggunaan produk dalam negeri membutuhkan nilai TKDN dan nilai Bobot Manfaat Perusahaan (BMP).</p> <p>Nilai BMP dapat diberikan dari unsur keberlanjutan yaitu sertifikat industri hijau.</p>	<p>SIH yang mendukung Green Building &amp; Green City di IKN seperti baja, semen, keramik, kaca, cat, peralatan perkantoran, dan peralatan rumah tangga, dst.</p>	<p>SIH dalam rangka Safeguarding produk dalam negeri untuk menghadapi perubahan regulasi di negara tujuan ekspor spt CBAM, SBTi, ESG, ISO, dst. Contoh SIH: aluminium, baja, CPO, Karet, Kakao, dst.</p>	<p>SIH untuk industri prioritas sesuai program strategis Kementerian untuk meningkatkan daya saing sekaligus memenuhi komitmen negara dalam NDC dan NZE (transisi energi dan dekarbonisasi) serta CE (Ekonomi Sirkular).</p>

# Competitive and Sustainable SMIs



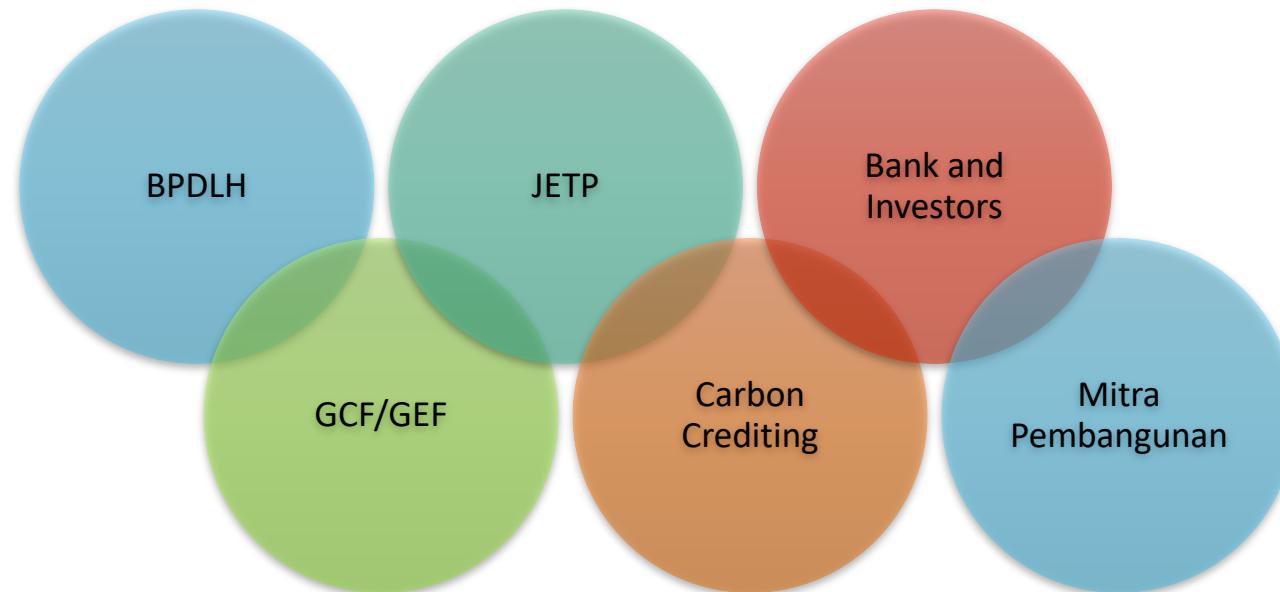
# GREEN SMIs PROGRAM IN INDONESIA



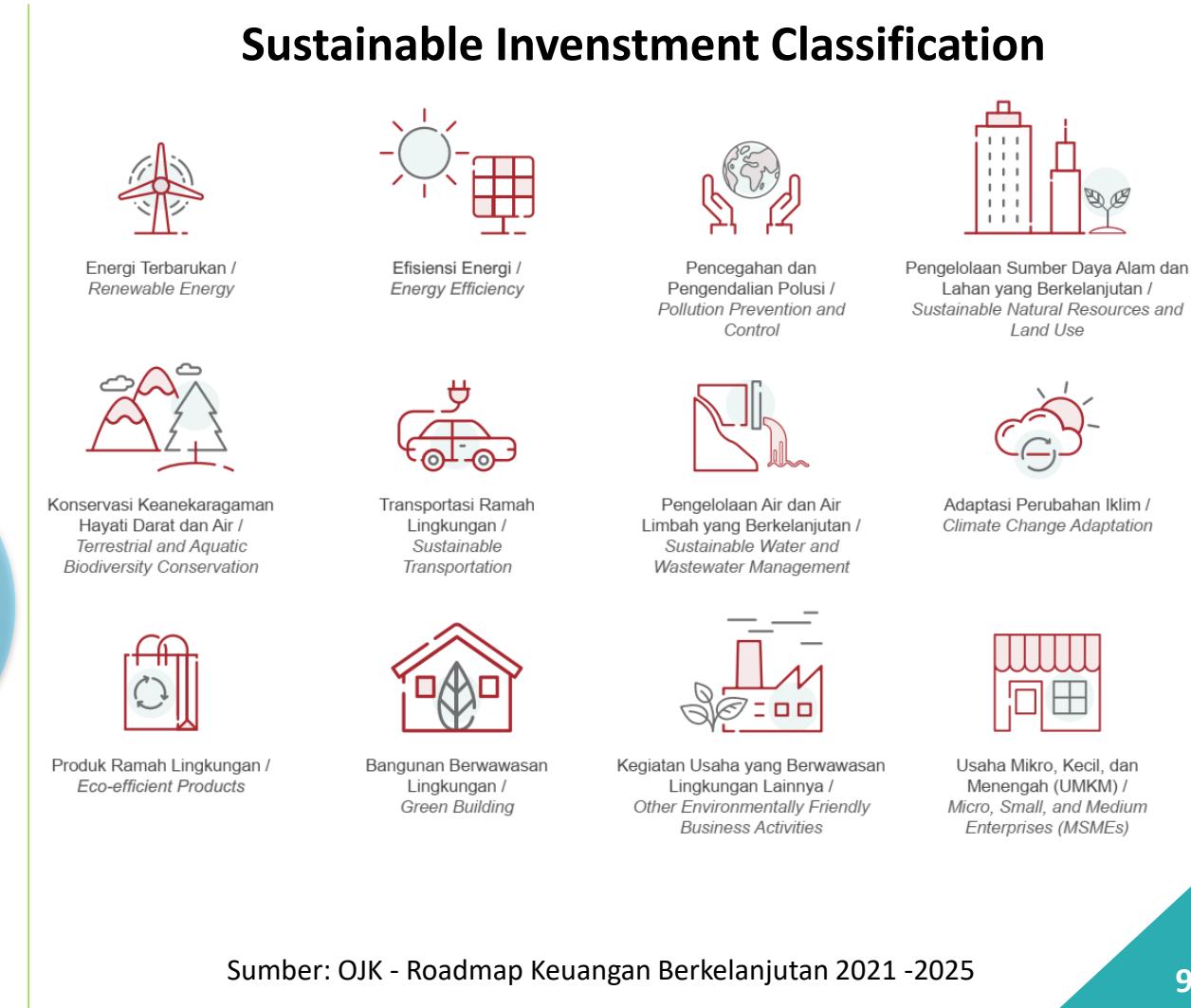
# Key action 1: Expanding the access to Green Financing or Sustainable Investments for SMIs

Dalam proses bisnisnya, Industri melakukan hampir semua kegiatan yang dikategorikan sebagai Kegiatan Usaha Berkelaanjutan sehingga industri yang Green atau menuju Green sangat besar peluangnya dalam mendapatkan pendanaan/investasi hijau

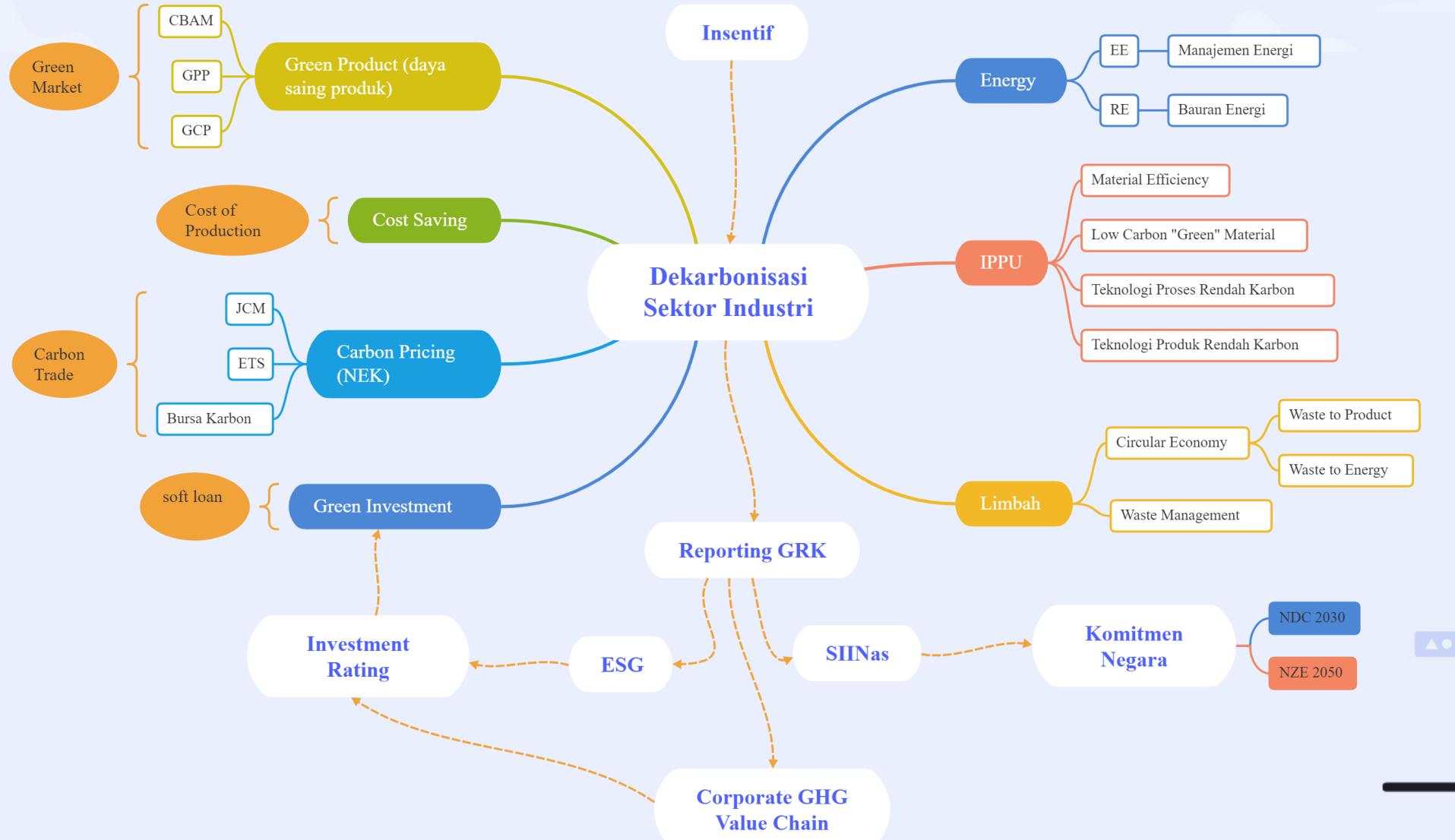
## Green Financing Potentials for SMIs in Indonesia



## Sustainable Investment Classification



# Key Action 2: Build Green Hub and Capacity Building Network for SMIs



- Pusat Industri Hijau
- Ditjen IKMA
- BBSPJI Kerajinan dan Batik (DIY)
- BBSPJ Pencegahan Pencemaran Industri (SMRG)
- BBSPJI KKP (DIY)
- Poltek APP
- Green Professionals: energy, CE, Climate action, green design

- BRIN
- Universities
- etc

# Key Action 3: Build a Robust Green Industrial Service Company (GISCO) and Strengthen Green Startups to Support the SMIs

## Penguatan Penyedia Jasa Industri Hijau (Green Industrial Service Company – GISCO)

### Guaranteed savings model

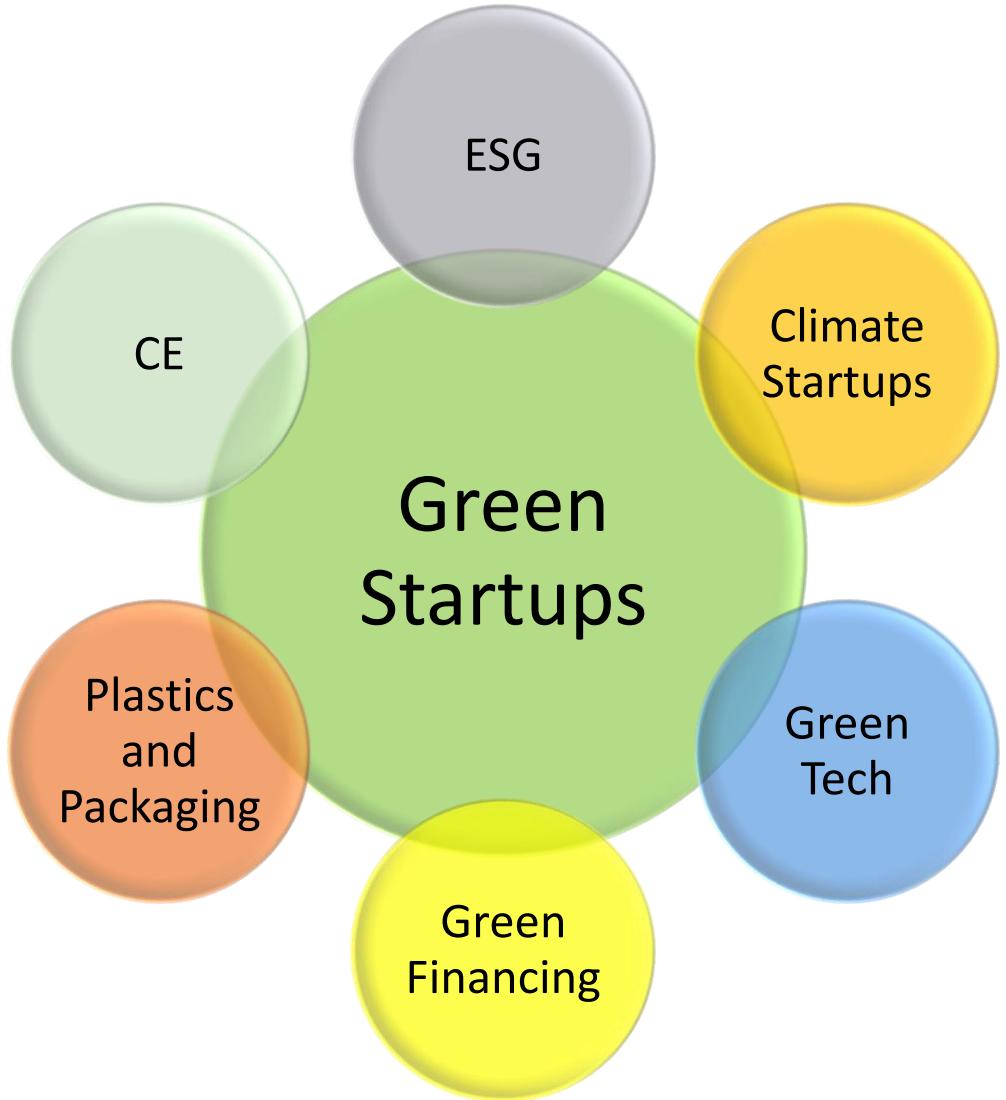


1. Preparation of a Technocratic Study on GISCO and Its funding schemes
2. GISCO Pilot Project
3. Assistance on establish of GISCOs, both private and BLU
4. Business Matching for GISCOs, SMIs as users and investors/financial institutions
5. Green Startup Communication Forum and GISCO Indonesia

### Shared savings model



# Strengthen Green Startups



## Bioma

FROM INDONESIA

Bioma is a rental platform that enables business to rent furniture, electronics and appliances. Our customers include FnB chains looking to establish new outlets, property companies looking t...

Finance

## Buangdisini

FROM INDONESIA

Buangdisini is a company that focuses on utilizing and enhancing waste into a valuable and profitable commodity. Buangdisini focuses on developing solutions that bring new transparency...

Built Environment

Plastics and Packaging

## Mallsampah

FROM INDONESIA

Mallsampah is circular economy tech provider. We are digitizing the traditional collection system in the community to increase the effectiveness of waste collection and...

Built Environment

Plastics and Packaging

## Mulung Parahita

FROM INDONESIA

A technology-based platform with sustainability principles impacting Environment, Community, and Economy, based in Bali. We created an ecosystem to collect waste directly...

Built Environment

Plastics and Packaging

## NoLimbah

FROM INDONESIA

NoLimbah is a mobile application that aims at cutting down waste leakage into our oceans at the source by optimizing waste collection, starting in Indonesia. We help modest-income...

Plastics and Packaging

## PT Seaweedtama Biopac Indonesia

FROM INDONESIA

We manufacture seaweed-based biopackaging to replace single use plastic, especially small format packaging, that is ubiquitous, nondegradable, and seems to be...

Plastics and Packaging

## Solusi Sampah Nusantara PT

FROM INDONESIA

We are startup offering waste management services to local government for collecting, sorting MRF and processing residue. We are concentrating in city and region base...

Built Environment

Plastics and Packaging



Kementerian  
Perindustrian  
REPUBLIK INDONESIA



# Thank You

