

CIRCULAR ECONOMY

Solusi Keberlanjutan Bisnis dan Kelestarian Lingkungan

Jumat, 9 Juli 2021
15.30 - 17.00 WIB

Moderator:



Fajar Kurniawan
Managing Partner
Social Investment Indonesia

Narasumber:



Ir. Achmad Gunawan Widjaksono, MAS
Direktur Verifikasi Pengelolaan Limbah B3 dan Limbah Non B3
Kementerian Lingkungan Hidup dan Kehutanan



Sinta Kaniawati
Advisor
PRAISE



Dr. Ir. Arya Hadi Dharmawan, MSc.Agr
Ketua Departemen SKPM
IPB University



Tema yang dibahas dalam seri-21 ini tentang **“Circular Economy. Solusi Keberlanjutan Bisnis dan Kelestarian Lingkungan”**. Sesi ini mendiskusikan mengenai konsep *circular economy* dan bagaimana *circular economy* berkontribusi dalam implementasi pola produksi dan konsumsi berkelanjutan. *Circular economy* erat kaitannya dengan salah satu kebijakan yang digulirkan oleh pemerintah, yaitu industri hijau. Penerapan industri hijau adalah mengupayakan efisiensi dan efektivitas terhadap penggunaan sumber daya secara berkelanjutan. Keberhasilan penerapan konsep *circular economy* dapat membantu pembuatan produk dan layanan menggunakan inovasi yang membantu memaksimalkan efisiensi penggunaan sumber daya.

Narasumber yang hadir yakni:

1. **Ir. Achmad Gunawan Widjacksono, MAS** - Kementerian Lingkungan Hidup dan Kehutanan
2. **Sinta Kaniawati** - PRAISE
3. **Dr. Ir. Arya Hadi Dharmawan, MSc.Agr** - IPB University

Circular Economy – Solution to the Business and Environmental Sustainability



Sinta Kaniawati

Sinta Kaniawati

Advisor PRAISE

PRAISE

Packaging and Recycling Association for Indonesia Sustainable Environment



FOUNDING MEMBERS

IPRO

Indonesia Packaging Recovery Organization

Circular Economy

Solution to the business and environmental sustainability

Presented by Sinta Kaniawati (PRAISE Advisor)

Social Investment Roundtable Discussion (SIRD) #21
9 July 2021



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FOUNDING MEMBERS

Optimize the potential of a sustainable Circular Economy model through three key areas

ADVOCACY

To drive implementation of ESR framework into waste management policy in Indonesia

RESEARCH & EDUCATION

To create awareness about the importance of sustainable waste management practices

PARTNERSHIP & COLLABORATION

To empower stakeholders through collaborative action

In partnership with government and all relevant stakeholders to implement a holistic, integrated and sustainable approach to packaging waste management in Indonesia

PRAISE Initiative to Support CE Development

Bali Bersih – TPS3R Development (MRF sorting facility)



- **Supporting TPS3R in Sanur Kauh, Bali to improve process & management on collection, segregation including better connection to recycling stream**
 - **30% waste diverted**
 - **36 Ton recyclables**
 - **Output incremental +3.7 X**
 - **Productivity +1.8 X**
 - **Profitable business**
- **It is on track to becoming a robust proof of concept which can be leveraged for our scaling solution through the TPS3R Academy**
- **Potential partners for scaling up**



PRO Business Model and Business Case Development

GAC Business Model

- **Worked with GAC on PRO business model based on learnings from PETCO and ECOCE**



STUDY TOUR IN GERMANY

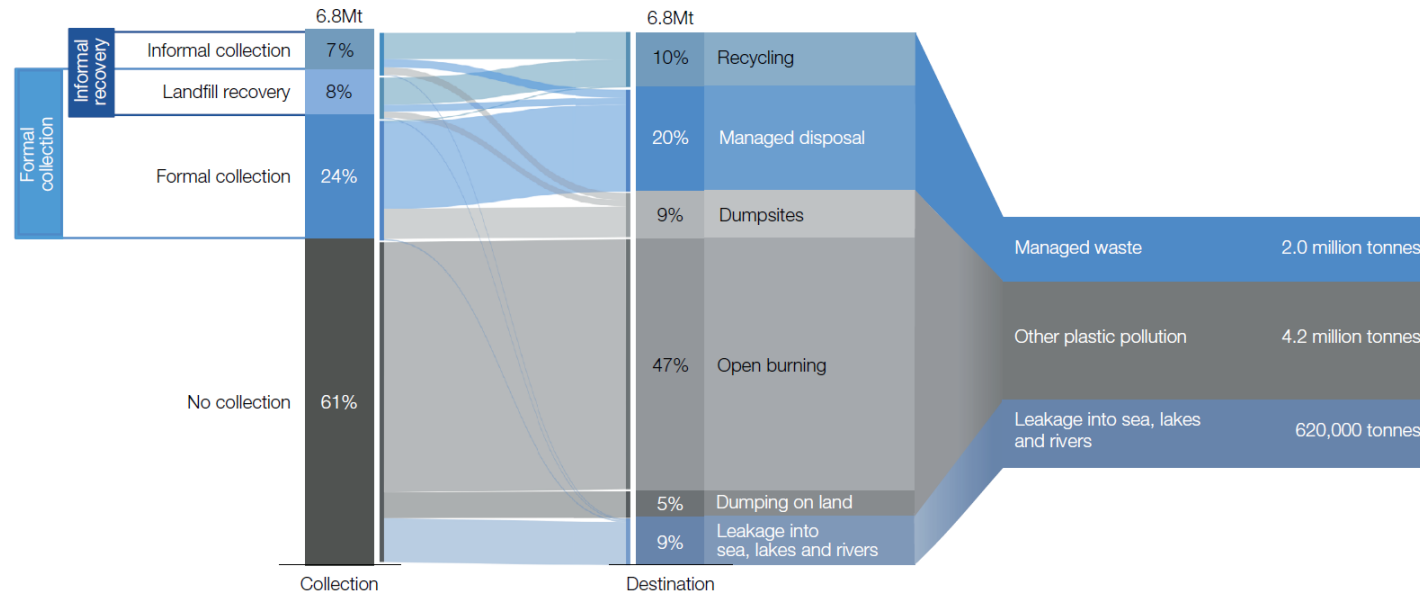
PRAISE giz



GIZ (German Development Agency) Invited and active participating in EPR Toolkit workshop to understand elements that make successful EPR system based on learning of GIZ

A GLIMPSE OF PLASTIC WASTE

Where Indonesia's plastic waste ends up today (percentage of total plastic waste generated)



CIRCULAR ECONOMY

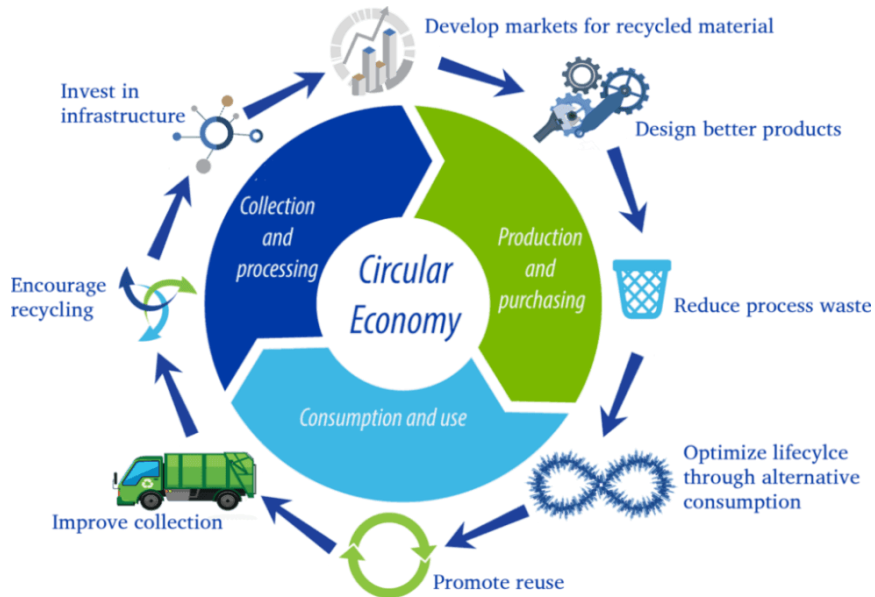


Image: Sustainable Global Resources Ltd.
Recycling Council of Ontario

We need to shift from linear economy (take-make-dispose) to Circular Economy with some of these following reason:

1. Our resources is limited
2. We need to encourage responsible consumption
3. Give second life to recycled material
4. Develop a sustainable market from recyclable that intervene the informal sector up to formal sector with the support of the government



Indonesia Packaging Recovery Organization

Indonesia Packaging Recovery Organization (IPRO)

is a voluntary, non-profit, independent, and professionally managed, focused on increasing the collection and recycling of used packaging.

Our goal is to increase the collection of used packaging and recycled claims by verifying financial flows, adhering to social and environmental standards following international best practices towards a circular economy in Indonesia.

IPRO is an initiative of companies that are members of the Packaging and Recycling Association for Sustainable Environment (PRAISE).

PRAISE

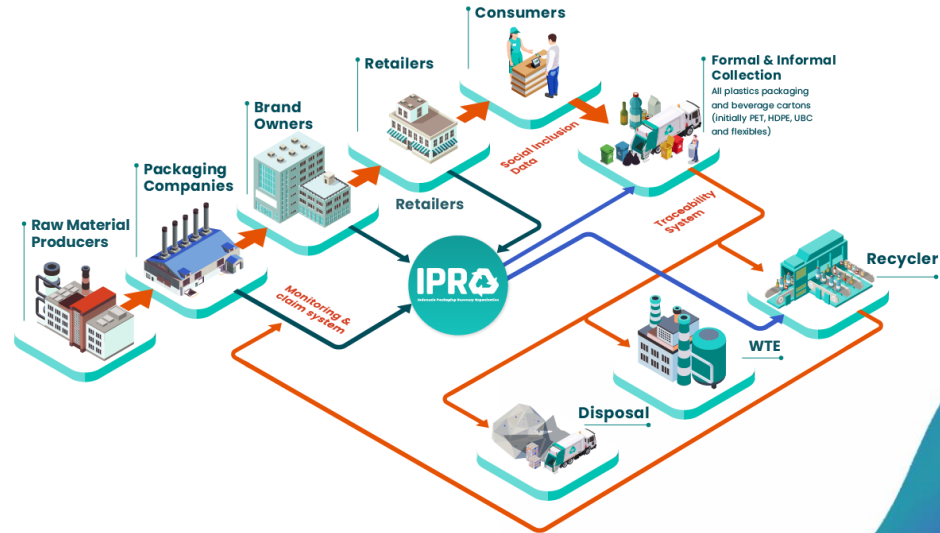
Packaging and Recycling Association for Indonesia Sustainable Environment



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Indonesia Packaging Recovery Organization



OUR COMMITMENT



Supports the government's National Strategy Policy (Jakstranas) on Managing and Reducing Waste which is stated in Indonesian President Regulation No. 97/2017 to **reduce 30% of waste and 70% of waste handling.**



Support efforts and initiatives from the community, communities related to waste management which aims to build a circular economy.



Open to work with stakeholders that shared commitment to deal with solid waste problems in Indonesia.



Educate the public in waste management based on a circular economy.

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Packaging and Recycling Association for Indonesia Sustainable Environment

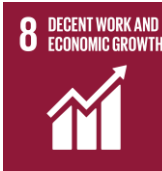


FOUNDING MEMBERS

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Indonesia Packaging Recovery Organization

SUSTAINABLE DEVELOPMENT GOALS



OUR INITIATIVE

*"How the Circular Economy is carried out in Indonesia, of course, adapts to the local context and looks at references from other countries for learning,"
(Karyanto Wibowo, Chairman of PRAISE)*



Category A

Increasing waste packaging collection capacity and recycling rate in specific material e.g. PET, UBC, HDPE, etc of the aggregators and/or recyclers through incentives.



Category B

The activity in Category B is to increase waste collection in the waste bank, junkshops and the TPS3R by improving the capacity building of the workers and existing infrastructure.



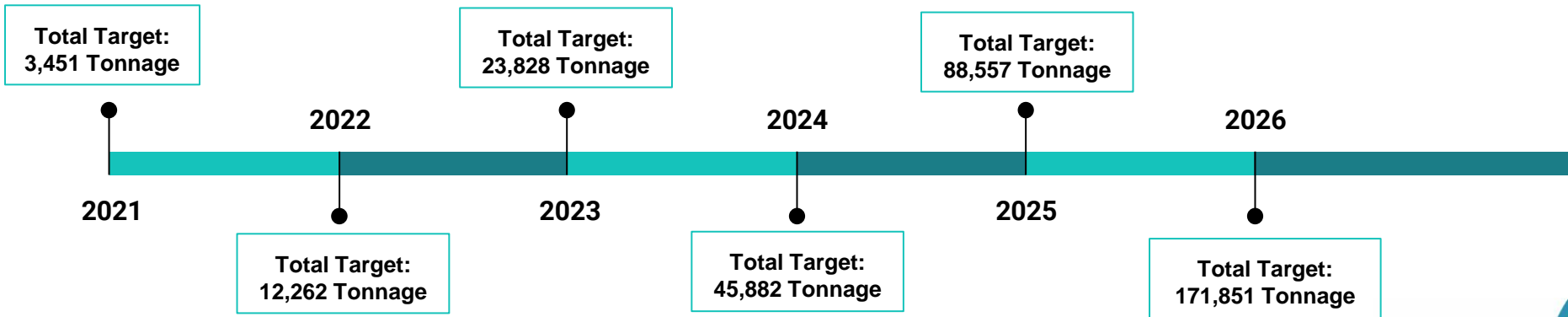
Category C

We implement change behavior education, policy guidance, and social inclusion amongst key stakeholders (informal workers, community, government, etc)



2021-2026 Target Plan

The figure below shows IPRO target plan in 5 years in increasing waste packaging collection and recycling rate through its each category.



ON-GOING PROGRAM



Category A

Increase packaging waste collection through the material supply chain with BaliPET on collecting PET material in Bali and Lombok Timur with 5 junkshops and est. 250 informal worker.



Category B

Increasing the capacity of the collection center (TPS3R, Bank Sampah Induk and junkshops) for waste collection in Kesiman, Bali with McKinsey and EcoBali.



Category C

1. Collaborating with CSEAS and GIZ in the Rethinking Plastics (Cat C) Pilot Project in Malang.
2. Collaborating with World Packaging Organization (WPO) and Indonesia Packaging Federation (IPF) in the preparation of Packaging Guidelines

These activities is supported by the local government

CHALLENGES

Though it may look perfect and ideal, we still encounter challenges



1. Knowledge gap on the importance of tackling waste issue

- Common understanding on circular economy
- In 2020, the index of public ignorance towards waste still has to be raised as much as 0.72 points. The target in 2025 is 0.30 points.
- Awareness towards the sustainable consumption

2. Data and material issue

- Despite of enough feedstock (material) for this CE to happen, but the access for recycler industry to reach out for this supply currently is fragmented.
- Data collection is still an issue, and the quality of the data still need to be verified.



3. Policy and regulations issue

- Alignment between central government, and regional and/or local government
- We need to have a continuously dialogue with all key stakeholders in the waste value chain

4. Drive collaboration with integrated approach

COLLABORATIVE ACTION

PRAISE

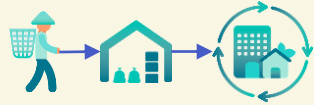
Packaging and Recycling Association for Indonesia Sustainable Environment



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Indonesia Packaging Recovery Organization



Collaboration in increasing collection and recycling rate.



Optimizing waste handling cost through a joint-industry effort rather than individual effort.



Cooperating with the Central Government and Regional Government, and maintaining continuous dialogue with all key stakeholders on effective policy.



Collaborating with communities and educational institutions to hold training programs on waste management at the source.
#DaurUlangPlastikmu

IPRO MEMBERS COMMITMENT



IPRO members beside implementing the collaborative action through IPRO, they also has done their own initiative to tackle waste issue



Coca-Cola is always committed to building positive values in society. Coca-Cola implements the World Without Waste Vision. This vision is related to the management of its product packaging, and has a goal to help collect and recycle packaging equivalent to the number of packages sold by 2030.



Nestlé Indonesia is a subsidiary of Nestlé S.A., the world's largest food and beverage manufacturer headquartered in Vevey, Switzerland. With the support of all stakeholders, Nestlé continues to fulfill its commitment to ensure 100% of its packaging can be recycled or reused by 2025.



Danone-AQUA has made a commitment in the #BijakBerplastik movement to collect more plastic waste than AQUA produces by 2025, expand education programs in schools to reach 5 million children and lead an education campaign targeting 100 million consumers in 2025 and ensuring the use of 100% packaging reusable, recyclable or biodegradable, and uses 50% recycled materials.



At Tetra Pak, sustainability has become a responsibility in our business strategy and operations embodied in the Tetra Pak brand promise—Protects What's Good(TM). Tetra Pak has increased the number of facilities in partnerships that collect beverage cartons separately for recycling in all countries where our business operates.



As a form of corporate social responsibility, Indofood always strives to carry out environmental conservation efforts, including through a packaging waste management program. These efforts include; educate the public to reduce and sort waste, run various programs such as the Waste Bank, Green Warmindo, and the Upnormal Project for the collection and processing of packaging waste, as well as establish partnerships with related parties for the recycling process and other forms of collaboration



In line with the global strategy of "The Unilever Compass", Unilever, which has been in Indonesia for more than 87 years, is committed to becoming a purpose-led and future-fit company; believes that business should be able to provide benefits to society and the environment. Unilever is committed that by 2025 to cut of virgin plastic in half, use 100% reusable, recyclable or compostable packaging, and collect and process more than they sell.

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Packaging and Recycling Association for Indonesia Sustainable Environment



Indonesia Packaging Recovery Organization



FOUNDING MEMBERS

Thank You

July 2021

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*Direktur Verifikasi Pengelolaan Limbah B3 dan
Limbah Non B3*

Kementerian Lingkungan Hidup dan Kehutanan

Pengelolaan Limbah B3/ non B3 – Circular Economy



Pengelolaan Limbah B3/non B3 -Circular Economy-

Achmad Gunawan W
Direktur Verifikasi Limbah B3/Limbah Non B3-
Direktorat Jendral PSLB3-KLHK

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B3/Limbah Non B3**

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Topic of the section

CIRCULAR ECONOMY

The idea of circular flow for materials and energy is not new, appearing as early as 1966 in the book by Kenneth E. Boulding, who explains that we should be in a "cyclical" system of production.

ISTILAH CIRCULAR ECONOMY
MUNCUL PADA TAHUN 1988

This notion was developed further, following 3 major events: the explosion of raw material prices between 2000 and 2010, the Chinese embargo on rare earth materials and the arrival of the economic crisis.¹


. One of the answers to these challenges is presented by the circular economy model. Thus, new modes of production and consumption are emerging with the main objective of generating billions of dollars while controlling and reducing environmental consequences

Today, the climate emergency and environmental challenges have strongly influenced and pushed companies and individuals to rethink their consumption and production patterns.

Circular Economy

Conceptualizing the circular economy: An analysis of 114 definitions
Julian Kirchherr[□], Denise Reike, Marko Hekkert
Innovation Studies Group, Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands

**Conceptualizing the circular
economy:
An analysis of 114 definitions**



We further find that the definitions show few explicit linkages of the circular economy concept to sustainable development. On the other hand, The main aim of the circular economy is considered to be

- economic prosperity,
- followed by environmental quality;
- its impact on social equity and
- future generations

Circular economy



Increasing circularity

Strategies

Smarter product use and manufacture	R0 Refuse	Make product redundant by abandoning its function or by offering the same function with a radically different product
	R1 Rethink	Make product use more intensive (e.g. by sharing product)
	R2 Reduce	Increase efficiency in product manufacture or use by consuming fewer natural resources and materials
Extend lifespan of product and its parts	R3 Reuse	Reuse by another consumer of discarded product which is still in good condition and fulfils its original function
	R4 Repair	Repair and maintenance of defective product so it can be used with its original function
	R5 Refurbish	Restore an old product and bring it up to date
	R6 Remanufacture	Use parts of discarded product in a new product with the same function
	R7 Repurpose	Use discarded product or its parts in a new product with a different function
Useful application of materials	R8 Recycle	Process materials to obtain the same (high grade) or lower (low grade) quality
	R9 Recover	Incineration of material with energy recovery

Linear economy

Fig. 1. The 9R Framework.

Source: Adapted from Potting et al. (2017, p.5)

12 Prinsip Green Engineering

(Chemical for life)


1. Inherent rather than Circumstanstisial
2. Prevention insteat of treatment
3. Design of separation
4. Maximum Efficiency (mass, energy, space (i.e. real estate) and time.
5. Output pull Vs Input Pushed (economic scale vs Output Need)
6. Conserve complexity
7. Durability rather than immortality
8. Meet need, minimize access
9. Minimize material diversity
10. Integrate Mass and Energy flows (HEN – MEN)
11. Design for commercial “*afterlife*”
12. Renewable rather than depleting




Selectivity

$$S = \frac{\text{Desired Products}}{\text{Undesired Products}}$$

mass, energy, space (i.e. real estate) and time.



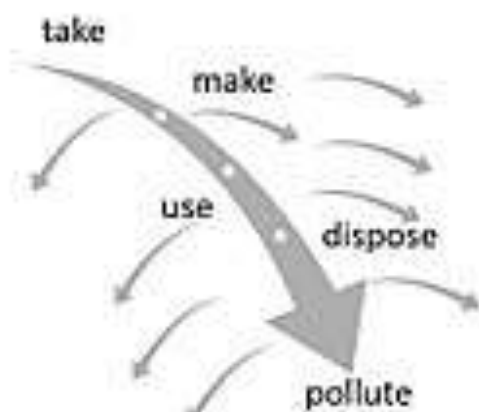
Some chemical engineering programs are starting to require multi objective analyses. Chemical engineering students at Purdue Univ., for example, must carry out safety and FMEA analyses, in addition to an economic evaluation.



Definisi FMEA menurut Lloyd Omdahl dan organisasi dunia ASCQ (American Society for Quality), arti dari FMEA Failure Mode Effect Analysis adalah:

- Sebuah Teknik Engineering yang digunakan untuk mengidentifikasi, menetapkan, mengurangi atau menghilangkan kegagalan yang diketahui dan atau potensi kegagalan (masalah, problem atau error) dari proses (sistem, desain atau layanan) sebelum kegagalan tersebut sampai ke tangan pelanggan.

LINEAR ECONOMICS



CC 3.0 Catherine Weedman 2016



Setiap orang yang menghasilkan Limbah B3 **wajib** melakukan **Pengelolaan Limbah B3** yang dihasilkannya.

Dalam hal setiap orang **tidak mampu** melakukan sendiri Pengelolaan Limbah B3 , pengelolaannya **diserahkan** kepada **pihak lain**.

JENIS KEGIATAN PENGELOLAAN LIMBAH B3



Pengurangan



Penyimpanan



Pengumpulan



Pengangkutan



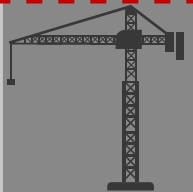
Pemanfaatan



Pengolahan



Penimbunan



Dumping



LIMBAH B3 DAN LIMBAH NON B3 SESUAI PP 22 TAHUN 2021

LIMBAH

LIMBAH B3

LIMBAH nonB3

Limbah B3 tercantum pada lampiran IX Peraturan Pemerintah Nomor 22 Tahun 2021

Pengelolaan LB3 mengacu :
Permen LHK Nomor 6 Tahun 2021

Sumber dari PLTU

LIMBAH nonB3 Terdaftar

Limbah nonB3 Terdaftar : pada lampiran XIV Peraturan Pemerintah Nomor 22 Tahun 2021

Kode Fly Ash : N106
Kode Bottom Ash : N107

LIMBAH nonB3 Khusus

Limbah nonB3 Khusus : merupakan Limbah B3 yang dikecualikan dari Limbah B3 berdasarkan penetapan pengecualian dari pengelolaan Limbah B3 dari Sumber Spesifik

- Limbah Non Bahan Berbahaya dan Beracun yang selanjutnya disebut **Limbah nonB3** adalah sisa suatu Usaha dan/atau Kegiatan yang tidak menunjukkan karakteristik Limbah B3.
- Pengelolaan **Limbah nonB3** :
 - Pengaturan dalam PP 22 Tahun 2021: BAB VII (Pasal 450 s.d. Pasal 470)
 - Pengaturan dalam Permen LHK tentang Pengelolaan Limbah nonB3 (**draft permen LHK**)



PENGELOLAAN LIMBAH NONB3 TERDAFTAR





- Pengelolaan Limbah nonB3 Terdaftar :**
- 1. PENGURANGAN**
 - 2. PENYIMPANAN**
 - 3. PEMANFAATAN**
 - 4. PENIMBUNAN**
 - 5. LINTAS BATAS LIMBAH**

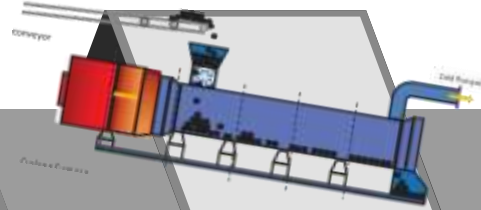


PERSYARATAN KEGIATAN PEMANFAATAN LIMBAH B3







Substitusi Bahan Baku

-  Sifat / fungsi **sama dengan** bahan baku yang disubstitusi
-  Komposisi < 100% dari total bahan baku
-  Produk **telah memiliki** SNI
-  Memenuhi standar LH



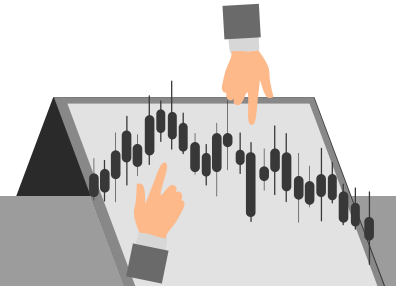
Substitusi Bahan Bakar*

-  Bila dibakar menghasilkan panas dan energi
-  Kalori ≥ 2500 kkal/kg; TOX < 2% dan Sulfur < 1%
-  Mengurangi bahan bakar utama
-  Sesuai standar LH



Bahan Baku

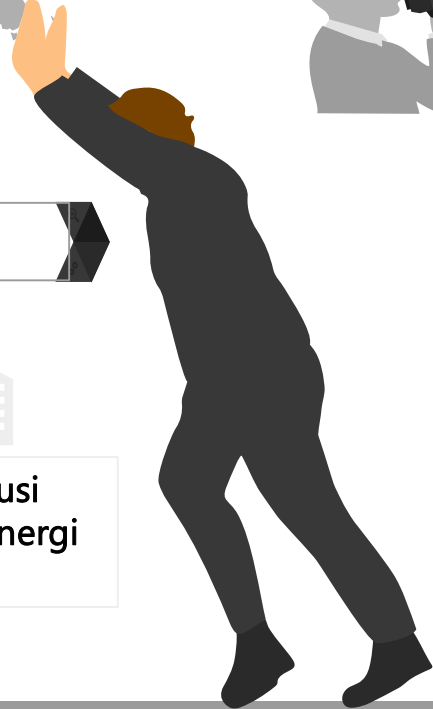
-  Sifat / fungsi **sama dengan** bahan baku
-  Komposisi 100% dari total bahan baku
-  **Memenuhi** SNI / standar lain yg setara
-  Memenuhi standar LH atau baku mutu LH



Sesuai IPTEK


Technically Feasible & Environment Friendly

TATA CARA KEGIATAN PEMANFAATAN LIMBAH B3



Wajib dilakukan uji coba Pemanfaatan Limbah B3 :



Substitusi Bahan Baku belum ber-SNI



Substitusi Sumber Energi



Kegiatan Uji Coba Pemanfaatan Limbah B3, mencakup:

1

Peralatan dan Teknologi Pemanfaatan Limbah B3



2

Metode Pemanfaatan Limbah B3



3

Fasilitas Pemanfaatan Limbah B3





Permohonan dan Penerbitan Persetujuan Teknis dan Surat Kelayakan Operasional Bid Pengelolaan Limbah B3

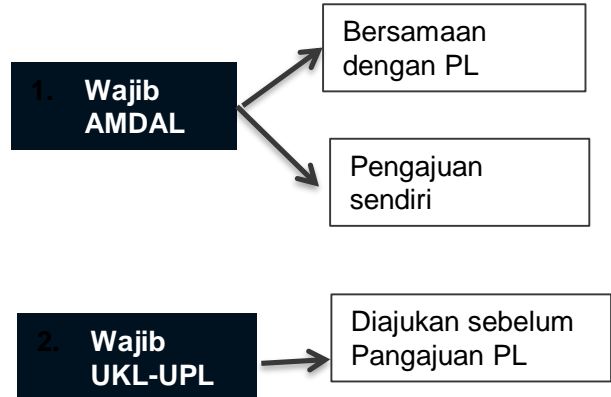
Persetujuan Teknis (Pertek) dan Surat Kelayakan Operasional (SLO) **WAJIB** dimiliki oleh :

KEGIATAN	PERTEK	SLO	KEWENANGAN (PEJABAT PENERBITAN)
a. Pengumpulan LB3	✓	✓	Menteri, Gubernur, Bupati, Walikota
b. Pemanfaatan LB3	✓	✓	Menteri
c. Pengolahan LB3	✓	✓	Menteri
d. Penimbunan LB3	✓	✓	Menteri
e. Dumping LB3	✓		Menteri

PROSES PENERBITAN PERTEK



CARA PENGAJUAN PERTEK



PERUBAHAN PERTEK dapat dilakukan :

- ✓ Sebelum terbitnya Pertek atau
- ✓ Sesudah terbitnya Pertek

- Pemanfaatan Limbah sebagai sumber daya adalah potensi besar dalam penerapan circular economy
- Pemahaman dan penerapan terkait circular economy di dalam suatu system maka sekaligus hal ini juga akan ikut mengelola lingkungan hidup dalam system ybs.
- Penerapan circular economy adalah merupakan keharusan untuk saat ini dan waktu yang akan datang apalagi di tengah tengah semakin langka dan semakin mahal nya bahan baku atau sumber daya serta persaingan yang begitu ketat.

TERIMA KASIH

Education is not learning the facts but learning how the
mind we think (Albert Einstein)

Circular Economy – Solusi Keberlanjutan Bisnis dan Kelestarian Lingkungan: Pandangan dari Akademisi



**Dr. Ir. Arya Hadi
Dharmawan, MSc.Agr**

Ketua Departemen SKPM IPB

Circular Economy - Solusi Keberlanjutan Bisnis dan Kelestarian Lingkungan: Pandangan dari Akademisi

**Arya Hadi Dharmawan
2021**

more detail:

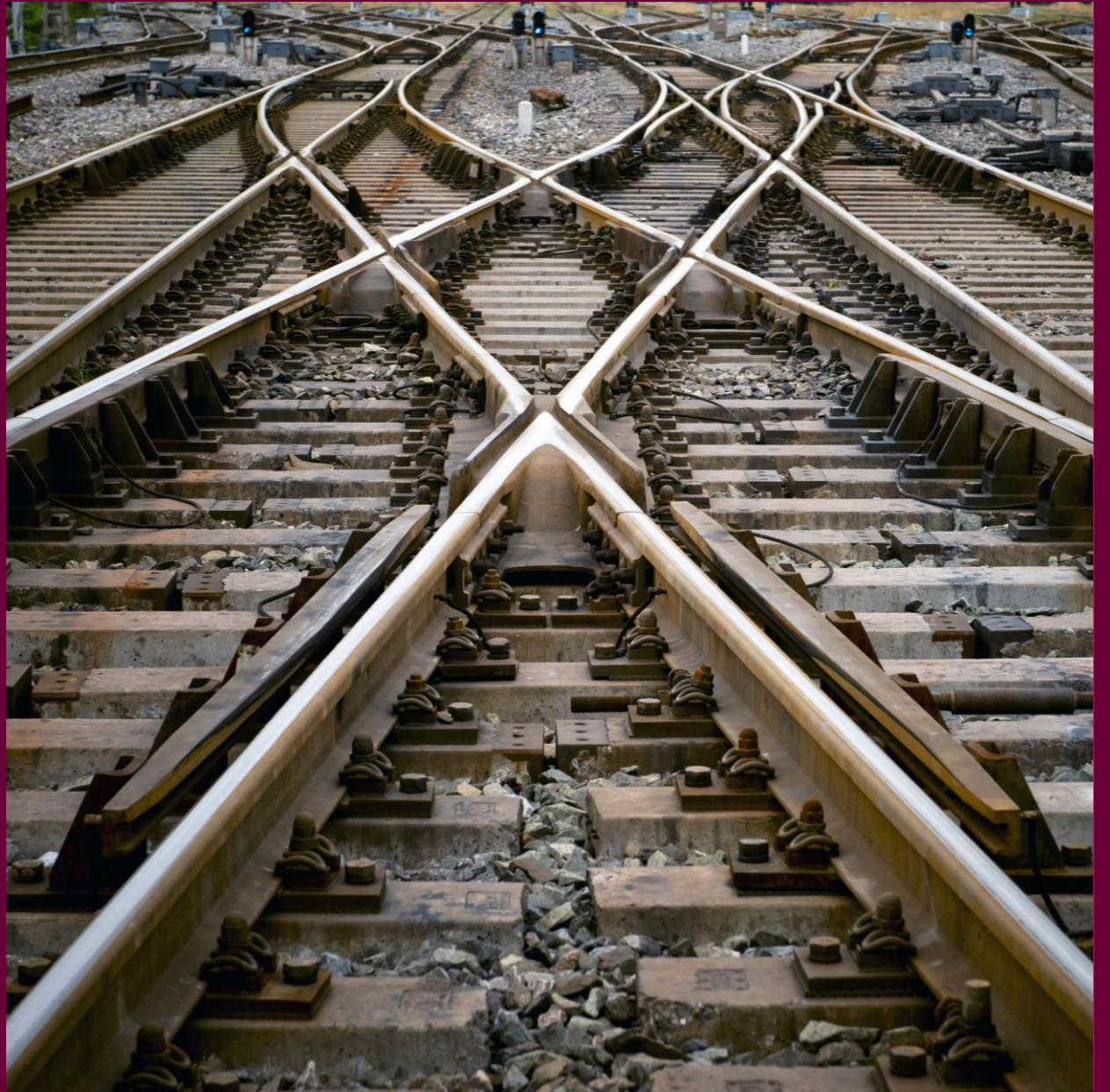
<https://orcid.org/0000-0001-7628-6103>

Social Investment Round-table Discussion #21



Outline Diskusi:

1. *Green Economy*
2. *Blue Economy*
3. *Circular Economy*
4. Contoh di Lapangan





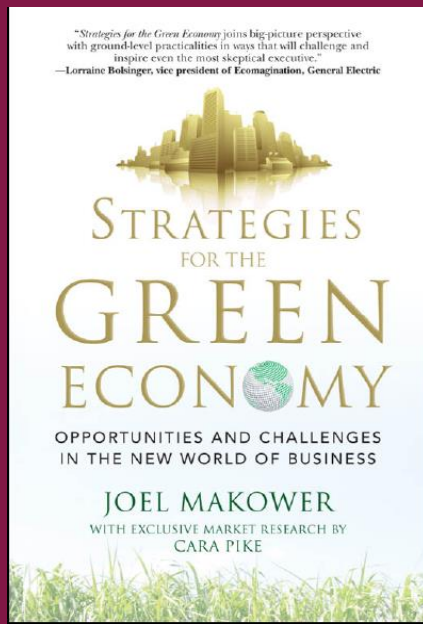
Green Economy

1. Semangat yang dibangun → the greening of mainstream business dalam perekonomian
2. Berkembangnya perdagangan dimana konsumen mulai memperhatikan environmental image dari sebuah produk.
3. Konsep industrial ecology → minimizing risk to environment

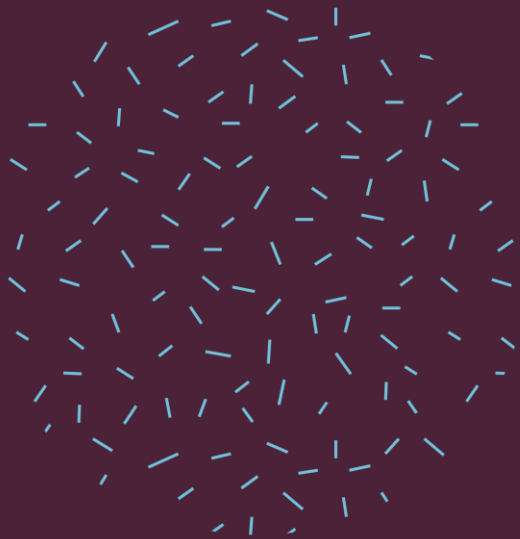
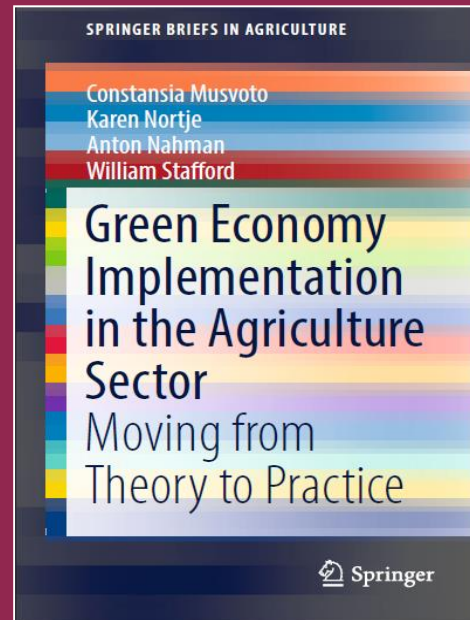


Blue-Circular Economy

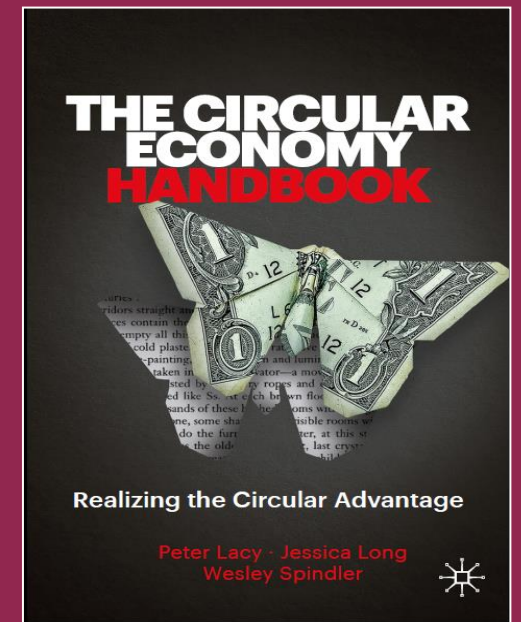
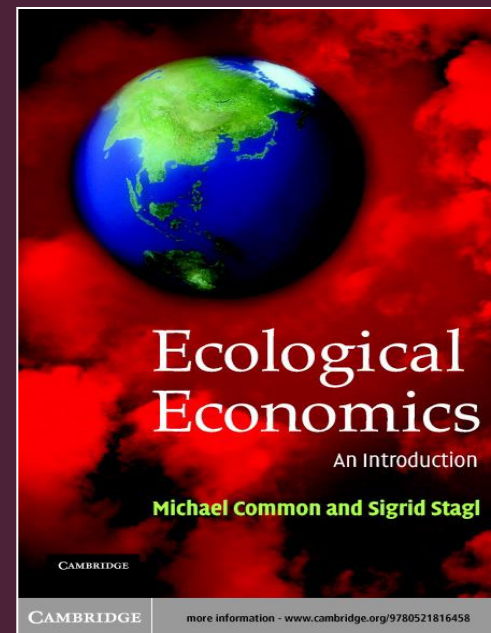
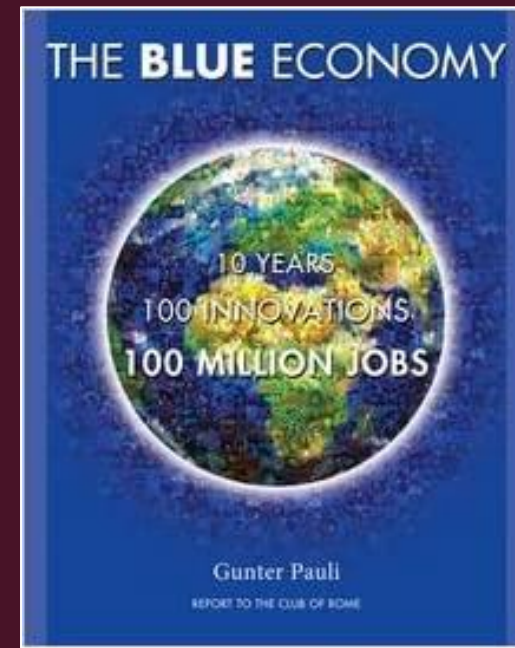
1. Process of production is oriented towards → zero waste tetapi juga menghasilkan benefit bagi alam.
2. Prinsip-prinsip ini dipegang ketat → *reuse, recycling, remanufacturing, industrial ecology, renewable energy, share economy*



Buku Rujukan *Green Economy*



Buku Rujukan Blue Economy – Circular Economy



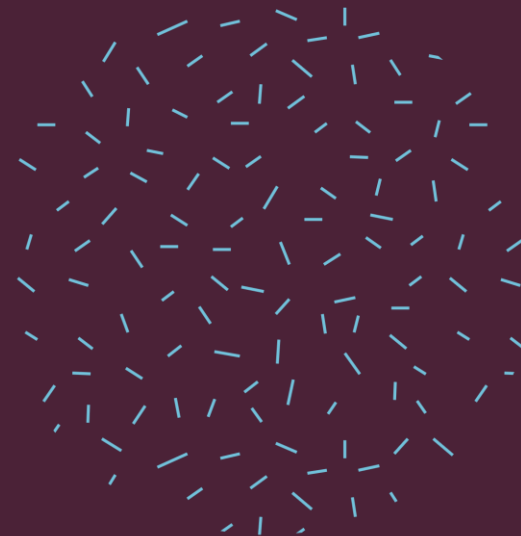
Paradigma lama (Non-Circular Economy)

“a traditional open-ended economy model developed with no built-in tendency to recycle, which is reflected by treating the environment as a waste reservoir” (Urbinati et al., 2017)



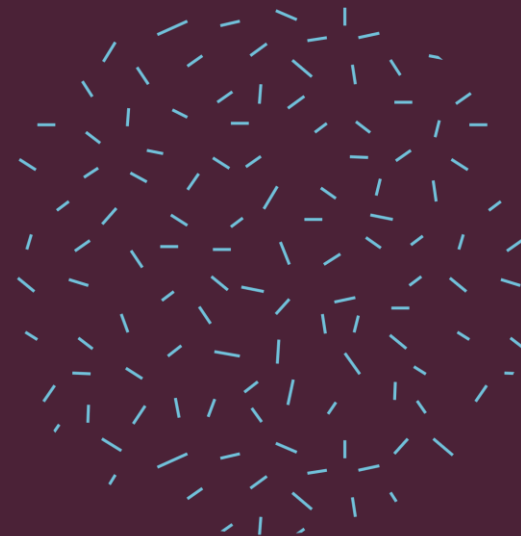
Paradigma Baru (Circular Economy)

- Circular Economy → the establishment of closed production systems.
- Ekonomi Sirkular → **waste** (residu) digunakan kembali dan disimpan dalam lingkaran produksi dan penggunaan yang memungkinkan menghasilkan lebih banyak nilai dalam periode waktu yang lebih lama



Goal of Circular Economy

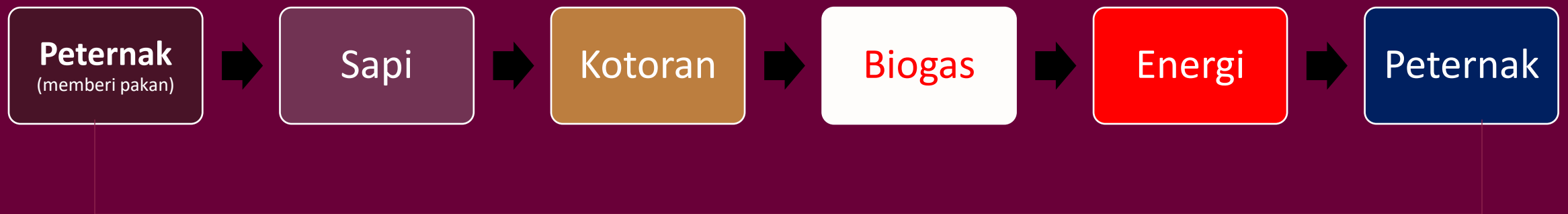
The goal of Circular Economy is to replace existing open production systems based on a linear consumption model, where raw materials are extracted, processed into finished products and become waste after they have been consumed, with **closed systems that reuse resources and conserve energy** (Urbinati et al., 2017)





Implementasi
Circular Economy
dalam era
Ecological
Industries

Blue Economy → menggunakan prinsip circular economy → Economy without waste, tetapi yang juga menghasilkan benefit kepada alam (ditekannya polusi) dan juga memberikan benefit bagi manusia)

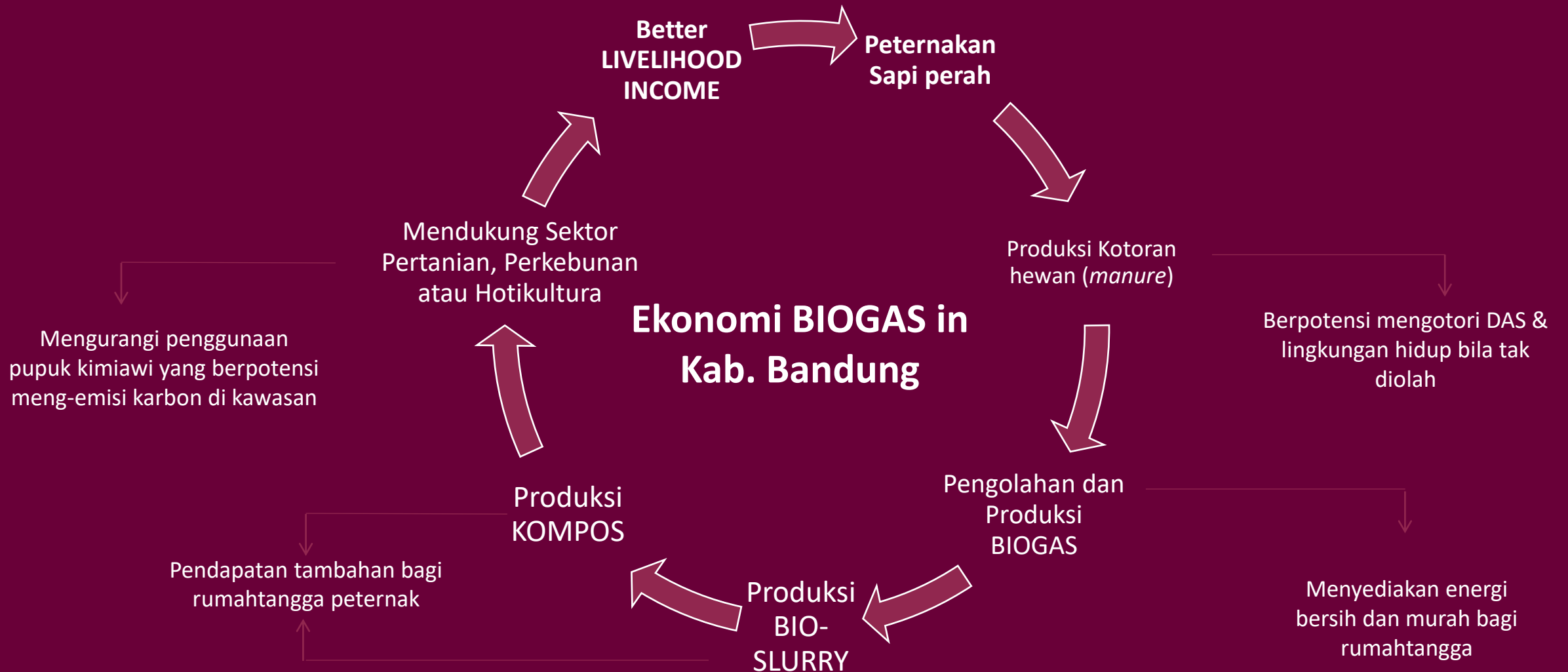




01. *Blue Economy* sebagai
solusi Pembangunan
Hijau di Pedesaan –
Kecamatan Pasir Jambu,
Kab. Bandung



Blue Economy → SMALL-SCALE ANIMAL HUSBANDRY → BIOGAS → memelihara CLEAN ENERGY & ENVIRONMENT



LIVESTOCK MANURE



MANURE PROCESSING



BIO-SLURRY



BIO-DIGESTER



Gas dari Biodigester disalurkan ke rumah untuk bahan bakar penerangan (pengganti listrik) terutama rumahtangga di pedesaan yang terisolir → dalam hal ini rumahtangga menghemat iuran PLN





Biogas Menggerakkan Ekonomi Lokal

**Manfaat BIOGAS
bagi Sistem Sosial dan
Ekosistem Pedesaan**




Kompos yang dapat dijual, menambah pendapatan rumah tangga



Bio-slurry menyuburkan tanaman kopi rakyat



Air Sungai yang Bersih Tanpa Pencemaran Kotoran Sapi



02. Palm Oil Waste-Based Bioenergy

Oil Palm Industries



Palm Oil Waste – POME →
Palm Oil Mill Effluent
(**POME**) atau limbah cair
kelapa sawit dapat
dimanfaatkan untuk
menghasilkan energi





Gigantic Bio-digester Dome

Biogas-Powered
Electricity
Generator → 4
MW (20.000 Ha)



03. Pembangkit Listrik Tenaga Sampah (PLTSa)





Pola pengelolaan sampah padat dengan metoda *landfill* atau timbunan

Cara ini dipandang ketinggalan jaman dan tidak memberikan solusi berkelanjutan dari persoalan sampah.

Sumber:

<https://www.hazardouswasteexperts.com/4-facts-about-landfills-thatll-keep-you-up-at-night/landfill2/>



Waste Incinerator Power Plant (WIPP) di Swedia

WIPP ATAU Pembangkit Listrik Tenaga Sampah (PLTSA) paling maju di dunia, dibangun di Swedia. Bahan baku sampahnya, bahkan diimpor dari Inggris.

Sumber:

[Various Advantages and Disadvantages of Waste Incineration - Conserve Energy Future \(conserve-energy-future.com\)](http://conserve-energy-future.com)



Solid Waste sebagai bahan bakar pembangkit listrik PLTSa

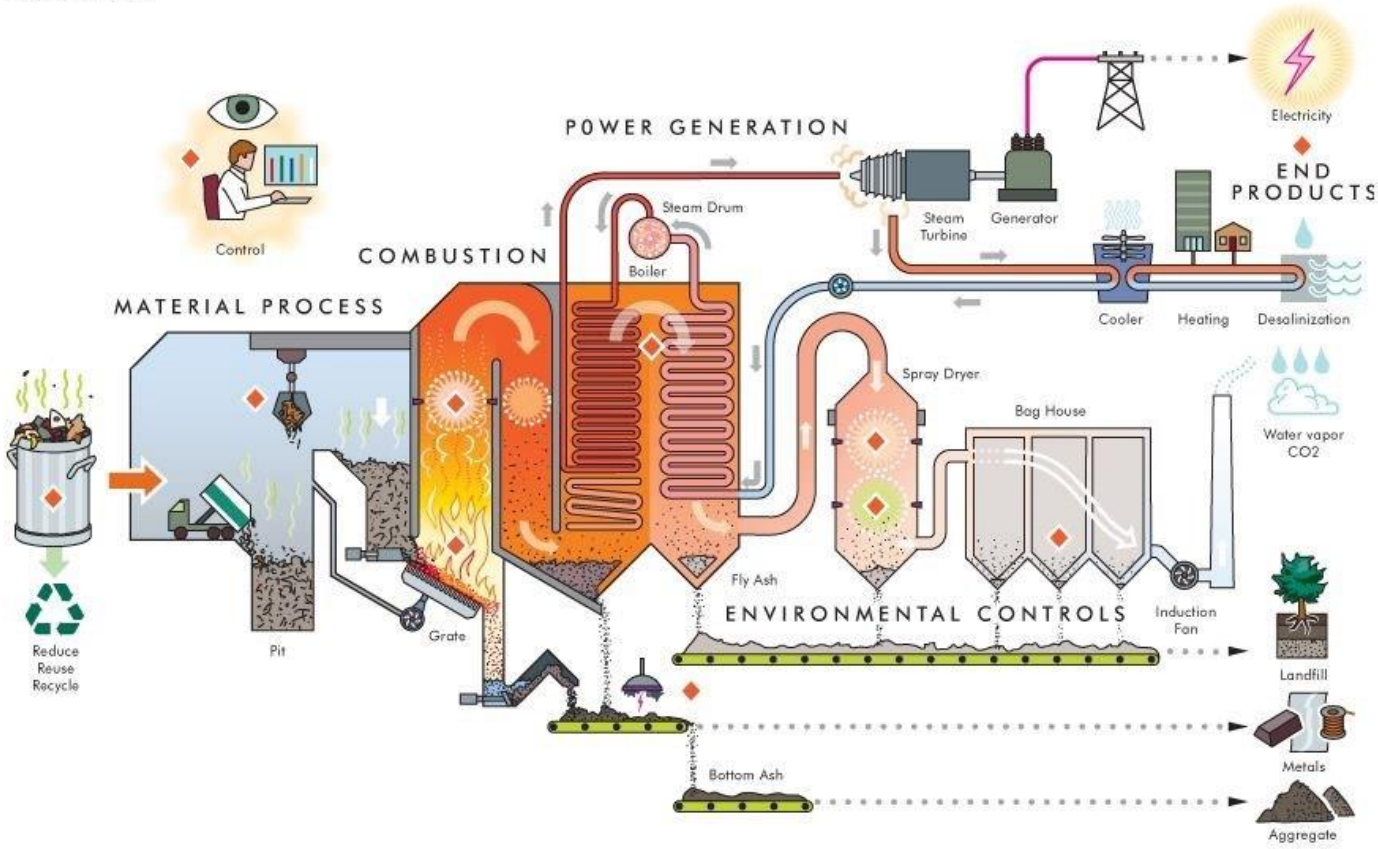
Pembangkit Listrik Tenaga
Sampah (PLTSa) menjadi
solusi sampah di perkotaan
negara maju sebagai
pengganti *landfill*

Sumber:

https://www.appropedia.org/Sweden%27s_waste-to-energy

Waste-to-Energy: How It Works

Waste-to-energy uses trash as a fuel for generating power, just as other power plants use coal, oil, or natural gas. The burning fuel heats water into steam that drives a turbine to create electricity. The process can reduce a community's landfill volume by up to 90 percent, and prevent one ton of carbon dioxide release for every ton of waste burned.



Pola Kerja Waste to Energy pada infrastruktur WIIP atau PLTSa

Sumber:

<https://waste4change.com/blog/waste-to-energy-can-it-be-the-answer-to-our-waste-problem/>

Terima Kasih

PROFILE

PT SAHABAT INVESTASI INDOTAMA

(Social Investment Indonesia)



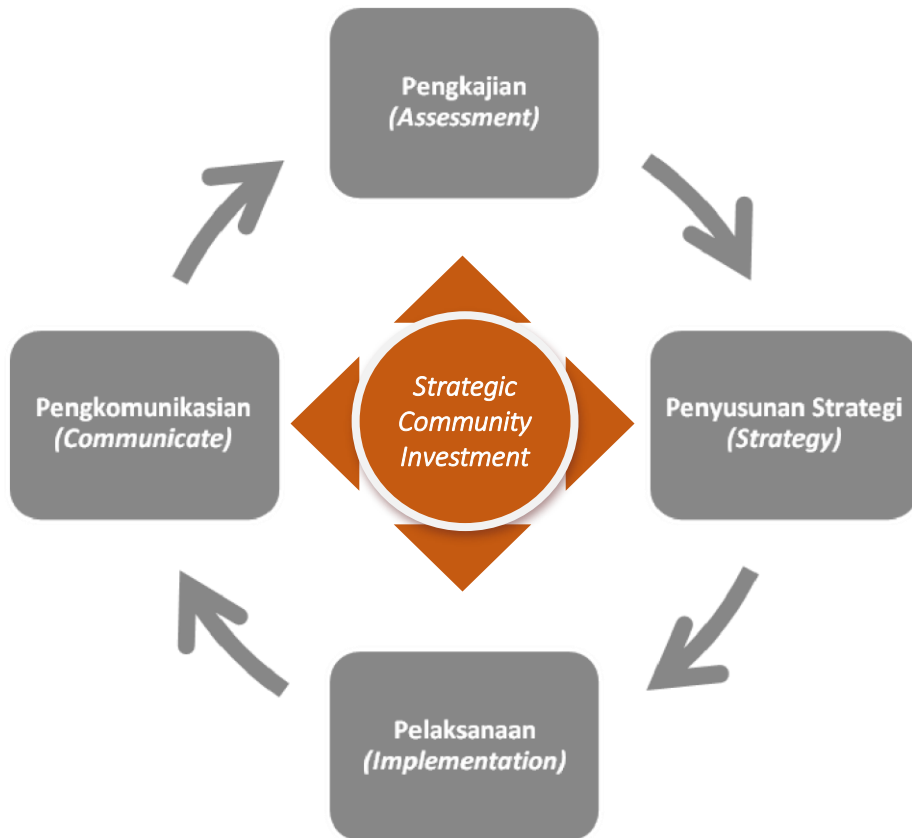
<https://socialinvestment.id>

SIAPA KAMI ?



- Konsultan yang mempunyai kompetensi inti dalam menyediakan dukungan untuk pengembangan masyarakat melalui pendekatan investasi sosial yang strategis (*strategic community investment*).
- Dukungan tersebut kami wujudkan dalam penyediaan layanan konsultasi kami secara terpadu dari:
 - Proses Perencanaan: Penilaian (*assessment*) dan Penyusunan Strategi;
 - Proses Pelaksanaan dan Pendampingan Teknis;
 - Proses Pemantauan, Evaluasi & Penilaian Dampak; dan
 - Proses Komunikasi & Pelibatan Pemangku Kepentingan
- Kami mendorong pelaksanaan investasi sosial sebagai bagian dari pelaksanaan tanggung jawab sosial perusahaan (CSR) sesuai dengan SNI ISO 26000:2013 tentang Panduan Tanggung Jawab Sosial.
- Kami bermitra dengan perusahaan dari seluruh sektor, khususnya pertambangan, minyak & gas, manufaktur, perkebunan & kehutanan.

LINGKUP & JENIS LAYANAN KAMI



- Untuk memaksimalkan dampak investasi sosial perusahaan, maka Kami menyediakan **layanan konsultasi** yang terintegrasi mengikuti daur program, mulai penilaian, penyusunan strategi, pelaksanaan & pengkomunikasian.
- Jenis layanan yang Kami berikan meliputi:
 - Pemberian Pendampingan Teknis (*Technical Assistance*)
 - Pelaksanaan Pengembangan Kapasitas (*Capacity Building*)
 - Pelaksanaan Riset dan Pengembangan Program
 - Alihdaya dan *Retainer Consultant*

PRODUK & JENIS LAYANAN KAMI

OUR PRODUCTS & SERVICES BASED ON OUR 4 CORE COMPETENCIES

TECHNICAL ASSISTANCE

Kami memberikan bantuan teknis untuk manajemen tingkat menengah & atas dalam menyusun program strategis investasi sosial. Beberapa layanan konsultasi yang kami berikan meliputi:

Strategic Plan Development

- Program Design & Manual Development
- Stakeholders Engagement Strategy
- Conflict Management & Resolution
- Employee Engagement/Volunteering
- Reporting & Communication
- Tri-sector Partnership
- Performance Indicator for Social Investment Program Development
- Program Monitoring & Evaluation

OUTSOURCING & RETAINER

- Banyak perusahaan yang mempunyai **keterbatasan SDM untuk pelaksanaan program investasi sosialnya**. Melalui layanan alih daya ini, maka **SDM pelaksanaan program dapat Kami dipasok sesuai dengan kebutuhan**.
- Melalui **penyediaan tenaga-tenaga profesional pelaksana program**, maka akan terjadi akselerasi pelaksanaan program.
- Kami **menawarkan SDM yang handal**, khususnya untuk level pelaksana (*officer, executive, supervisor, superintendent hingga senior manager*).
- Bentuk dukungan lainnya yang dapat dimanfaatkan **berupa retainer consultant untuk membantu pelaksanaan program perusahaan**.

RESEARCH

Untuk menunjang efektifitas dan efisiensi pelaksanaan program investasi sosial, maka diperlukan beberapa pengkajian dan penelitian. Kami telah berpengalaman melakukan berbagai pengkajian dan penelitian, diantaranya adalah:

- Social Impact Assessment
- Economic Impact Assessment
- Stakeholders Mapping
- Social Mapping
- Baseline Studi & Community Need Assessment
- Perception Study
- Community Satisfaction Survey
- Impact Evaluation, khususnya menggunakan Metode **Social Return on Investment/SROI & Sustainable Livelihood Impact Assessment/SLIA**

TRAINING & CAPACITY BUILDING

Pengembangan kapasitas merupakan hal yang esensial bagi perusahaan untuk meningkatkan pengetahuan dan keterampilan pelaksana program. Kami secara reguler mengadakan sesi pembelajaran (*learning series*), seperti:

- Program design based-on Risk & Opportunity Assessment
- Social Assessment
- Measuring Program's Impact
- Project Management
- Conflict Management

Kami juga menyediakan layanan **Inhouse & Tailor Made Training**, dengan materi, waktu dan lokasi pelaksanaan yang lebih fleksibel.

Kami juga memberikan layanan **pengembangan kapasitas untuk mitra kerja, kelompok/kelembagaan pemangku kepentingan dan komunitas**.

KLIEN KAMI



<https://socialinvestment.id/>

Informasi lengkap dapat diakses di:
<https://socialinvestment.id>

AGENDA SII LEARNING SERIES TERDEKAT



2. Social Assessment and Stakeholder Management for Strategic Social Investment #Batch4

Tentang Pelatihan:

Pada pelatihan ini Bapak/ Ibu akan mendapatkan pengetahuan dan keterampilan mengenai berbagai teknik dan tools untuk melakukan penilaian sosial (*social assessment*) yang dibekali keterampilan dalam mengelola pemangku kepentingan (*stakeholder management*), identifikasi isu sosial strategis dan merumuskan strategi pembinaan hubungan dengan pemangku kepentingan. Sehingga proyek atau program yang dilaksanakan nantinya dapat berjalan lebih efektif dan tepat sasaran.

Ingin mengetahui atau memperdalam tentang penilaian sosial dan mengelola pemangku kepentingan?

Mari belajar langsung bersama ahlinya, dalam Virtual Class SII Learning Series: "Social Assessment and Stakeholder Management for Strategic Social Investment #Batch4" berikut:

Tanggal: 14-15 Juli 2021

Waktu : 08:30 s.d. 15:30 WIB

Tempat : Zoom Meeting Room

Pendaftaran:

<https://bit.ly/daftarSASM4>

Social Investment Indonesia | **VIRTUAL CLASS LEARNING SERIES**

Social Assessment and Stakeholders Management for Strategic Social Investment #Batch4

14-15 Juli 2021
Sesi 1: 08.30 - 11.30 WIB | Sesi 2: 13.00 - 15.30 WIB

Investasi:
Rp 6.000.000,- >> Rp 3.999.0000,-
Rp 10.497.000,-/3 orang/ 1 lembaga
(belum termasuk ppn)

Peserta memperoleh:

- Konfirmasi via email
- Akses zoom meeting room
- e-Sertifikat
- Panduan training dan modul materi

Registrasi
bit.ly/daftarSASM4

Fasilitator:

FAJAR KURNIAWAN
Managing Director - Social Investment Indonesia

Narahubung

- Deni Ejar (0813-1724-5657)
- Rizal (0852-2035-3655)
- Arief (0877-5570-7171)

<https://socialinvestment.id>
info@socialinvestment.id

Social Investment Indonesia

4. Creating Shared Value (CSV); Maximizing Your Business Impact for Stakeholder #Batch1

Tentang Pelatihan:

Creating Shared Value (CSV) melihat kebutuhan/masalah ekonomi, sosial, dan lingkungan yang dihadapi masyarakat sebagai peluang bisnis. Dengan menggabungkan aset dan keahlian inti perusahaan, CSV meningkatkan keuntungan dan keunggulan perusahaan melalui kebijakan dan tindakan yang dilakukan secara terencana.

Inisiatif CSV diidealkan berada pada kuadran tertinggi dalam mendatangkan manfaat untuk perusahaan dan masyarakat.

Ingin mengetahui atau memperdalam tentang CSV, mari belajar langsung bersama ahlinya, dalam *Virtual Learning Series*: "Creating Shared Value (CSV); Maximizing Your Business Impact for Stakeholder #Batch1", yang akan berlangsung pada:

Tanggal: 27-29 Juli 2021

Waktu : 08:30 s.d. 15:30 WIB

Tempat : Zoom Meeting Room

Pendaftaran:

<https://bit.ly/daftarCSV1>

Social Investment Indonesia | **VIRTUAL CLASS LEARNING SERIES**

CREATING SHARED VALUE (CSV); MAXIMIZING YOUR BUSINESS IMPACT FOR STAKEHOLDER #BATCH1

27-29 JULI 2021
Sesi 1: 08.30 - 11.30 WIB
Sesi 2: 13.00 - 15.30 WIB

Registrasi
bit.ly/daftarCSV1

Investasi:
~~Rp 7.000.000,-~~ >> **Rp 6.000.000,-**
Rp 16.500.000,-/3 orang/ 1 lembaga
(belum termasuk ppn)

Peserta memperoleh:

- Panduan training dan modul materi
- Konfirmasi via email
- Akses zoom meeting room
- e-Sertifikat

Narahubung:
Deni Ejar (0813-1724-5657)
Rizal (0852-2035-3655)
Arief (0877-5570-7171)

Fasilitator:

- JALAL**
Chairperson Advisory Board - Social Investment Indonesia
- FAJAR KURNIAWAN**
Managing Director - Social Investment Indonesia

<https://socialinvestment.id> Social Investment Indonesia info@socialinvestment.id

Question & Answer Please ask

For more information, visit our website:

<https://socialinvestment.id/virtual-class/>

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