

GREEN FINANCE and INTERNAL AUDIT ROLES

Discussion Paper

BDO Konsultan Indonesia

4 Jul 2023



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SPEAKER

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Anjar Priandoyo is an ESG advisor on the area of environmental impact of energy development in relation with low carbon energy supply and reduced emissions of short lived climate pollutants. Currently Anjar works as ESG advisor for BDO Indonesia with prior working experience for PwC, Deloitte and Ernst & Young.

Anjar has BSc in Computer Science from Universitas Gadjah Mada Indonesia. He has MSc Engineering Management and PhD in Environmental Science from University of York, UK with focus on sustainable energy.

WHY GREEN FINANCE MATTER

“why Green Finance matter in ESG landscape
and overall sustainability trends”



WHY GREEN FINANCE MATTER?

Environmental Social Governance (ESG) matter

- 1 Internal and external stakeholder pressure
- 2 Setting an emission reduction target (Net Zero or Science-Based target)
- 3 Regulatory pressure e.g. OJK, ESDM, LHK
- 4 Participation in carbon markets
- 5 Reporting e.g Task Force on Climate-Related Financial Disclosures
- 6 Corporate Image/reputation
- 7 Understand and manage high-emitting business areas to find efficiencies and cost savings
- 8 Understand exposures to physical and transition risks

IF GREEN FINANCE MATTER WHY ITS COMPLICATED?

Sustainability is complicated

1

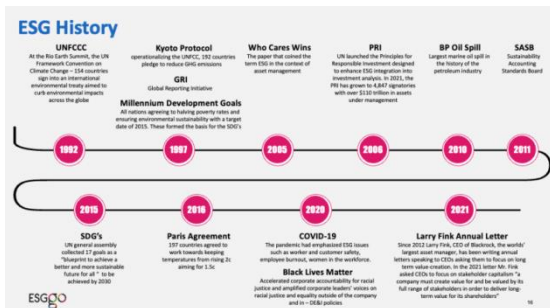
Green finance is not something new. The term already used many years ago, including its variation, CSR, GHG (GRK), ESG, Sustainability. And the term will going to keep evolve (the jargon evolution)

2

Technology is changing. Things that currently sustainable might actually not sustainable in the future.

3

Complex social political issues that intervention is not easy. Factors such as externality, willingness to pay, subjective well being



INDONESIA IS RELEVANT IN GREEN FINANCE LANDSCAPE

The gap is there, the risk is there

1

We are largest oil, gas, coal, renewable energy in the world.
We are naturally extractive industry based country.

2

We are also the largest pollutant, one of the largest inequality

3

The problem of definition, not every things that considered green is green. Green mining for example (If the mining process is not green the end product might not green)

WHAT IS THE CHALLENGES

“why ESG Matter”

LATEST TRENDS IN SUSTAINABILITY

Latest trends in sustainability from management system approach to strategy approach

01 Management System Approach

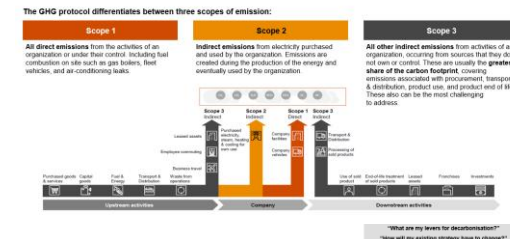
For organizations committed to addressing their impact, conserving resources and improving the bottom line through efficient energy management, we developed ISO 50001.

Designed to support organizations in all sectors, this ISO standard provides a practical way to improve energy use, through the development of an energy management system (EnMS).



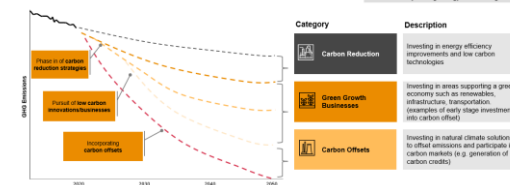
02 Inventory/Accounting Approach

Energy & Emission, Net Zero Client Journey - Carbon Footprint Calculation



03 Strategy Approach

Sustainability, Decarbonisation & carbon offset strategy and roadmap

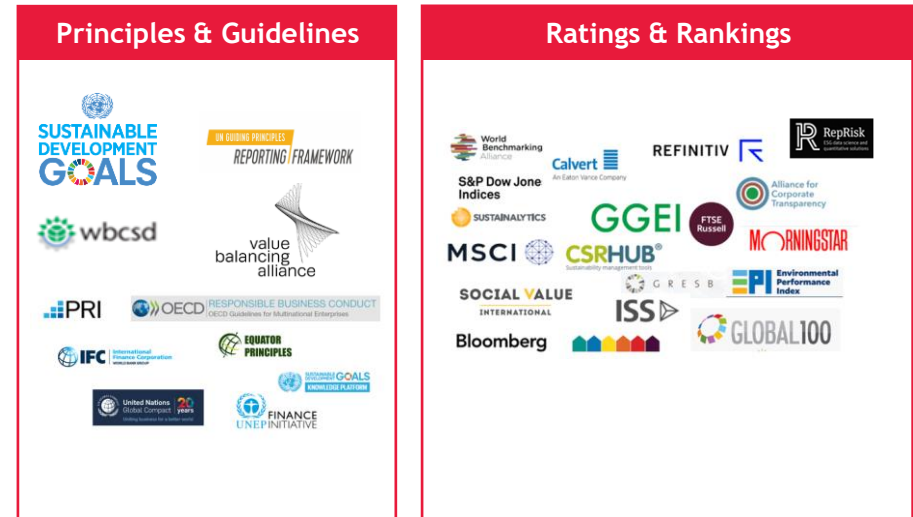


SUSTAINABILITY LANDSCAPE

Standards



International Sustainability Standards Board



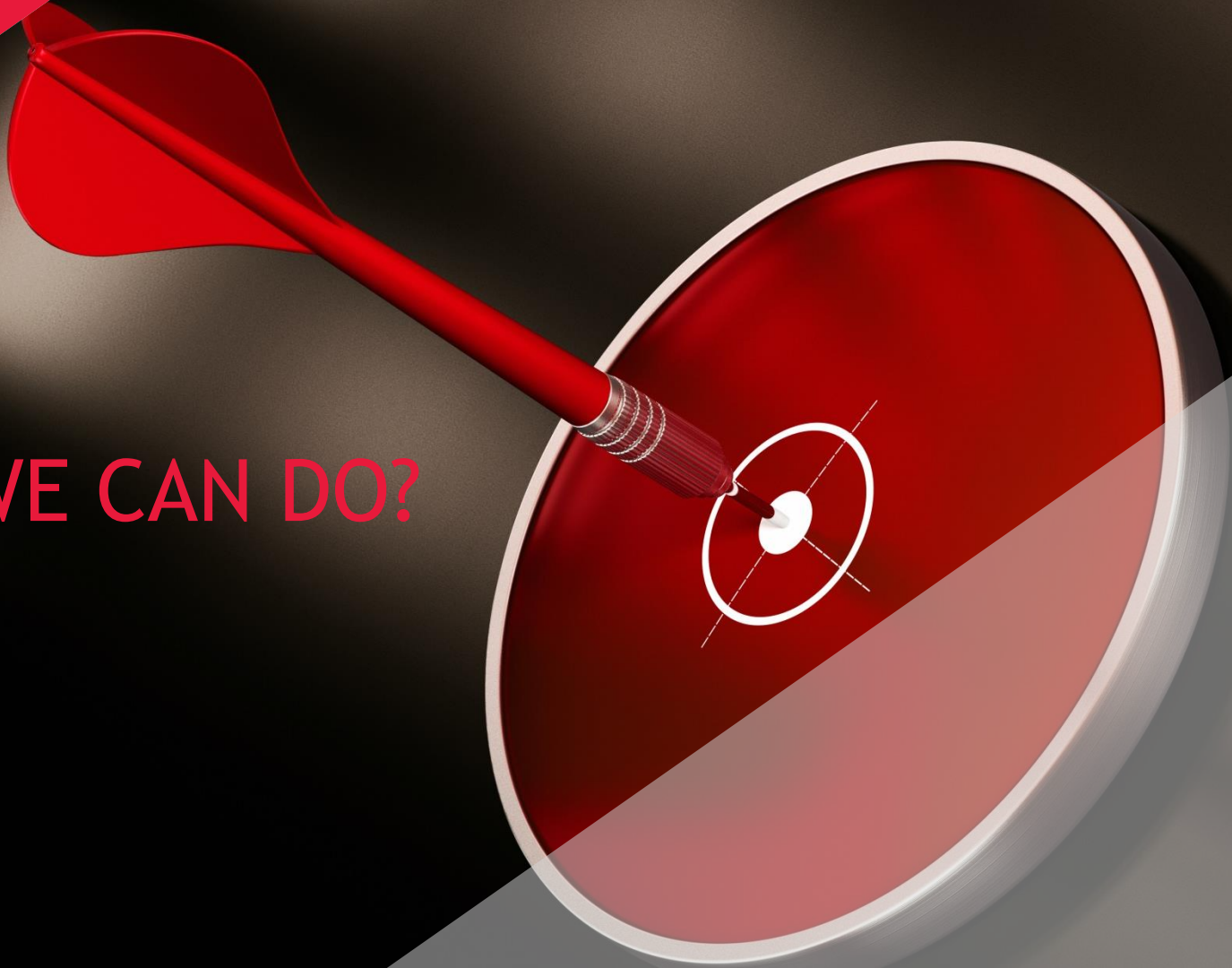
SUSTAINABILITY LANDSCAPE

Strategy



WHAT WE CAN DO?

“why ESG Matter”



WHAT WE CAN DO

Internal Audit roles in Green Finance

ASSURANCE:

Complying with regulatory developments on ESG/Green Finance risk assessment, measurement and disclosure

1. Review reporting metrics for relevancy, accuracy, timeliness, and consistency
2. Review reporting for consistency with formal financial disclosure filings
3. Conduct materiality or risk assessments on ESG reporting.
4. Incorporate ESG into audit plans

ADVISORY:

Developing ESG/Green Finance policies and frameworks to support investment decision processes, impact monitoring, portfolio construction and reporting to investors

1. Build an ESG control environment
2. Recommend reporting metrics
3. Advise on ESG governance

IIA: Internal audit's role in ESG Reporting: Independent assurance is critical to effective sustainability reporting

NOT EVERY TRANSITION IS SUCCESSFUL

Being a risk taker can lead to both successes and failures, as higher risks carry the potential for greater rewards but also more significant losses

1

Organizations are likely to be impacted by transition risks arising from policy and regulation changes, new technologies and markets, and reputational effects based on how they transition to a low-carbon economy.

2

Organizations and governments are increasingly at risk of potential legal actions if they fail to take steps to mitigate climate change or if they take actions that undermine the safety and livelihoods of their workers and citizens.

APPENDIX

“why ESG Matter”

ISO 50001

Energy Management System



Energy is critical to organizations, but often represents a significant cost - both to them and the environment.

World energy consumption continues to rise: it has more than doubled in the last 40 years and is projected to increase a further 30% by 2040. What's more, energy is the major contributor to climate change, making up nearly 60 % of the world's greenhouse gas emissions.

Taking action to better manage our energy consumption not only helps the planet, it saves money for organizations and society as a whole. A study commissioned by the ClimateWorks Foundation, a non-governmental organization that leverages the power of collective philanthropy in the fight against climate change, showed that if more were done to improve energy efficiency and reduce carbon growth in the industrial and buildings sectors alone, we could make over USD 3.2 trillion in public health-related savings

ISO 50001:2018, Energy management systems - Requirements with guidance for use, is a **strategic tool** that helps organizations put in place an energy management system and use their energy more efficiently and effectively

ISO 50001

Energy Management System

1	AP2 Soekarno Hatta T3	21	PT. Gistex	41	PT. INDONESIA POWER - PLTA SAGULING PGU	61	PT. Kideco Jaya Agung	81	PT. Polyplex Films Indonesia
2	Ditjen EBTKE	22	PT. Great Giant Pineapple	42	PT. INDONESIA POWER - PLTDG BALI PGU	62	PT. KMK Global Sports K1	82	PT. Pupuk Kalimantan Timur
3	Pertamina Hulu Mahakam	23	PT. Indah Kiat Pulp & Paper Perawang Mill	43	PT. INDONESIA POWER - PLTGU CILEGON OMU	63	PT. LESTARI BANTEN ENERGI	83	PT. Pupuk Kujang
4	PHE WMO	24	PT. Indah Kiat Pulp & Paper Serang Mill	44	PT. INDONESIA POWER - PLTGU GRATI PGU	64	PT. Lontar Papyrus Pulp & Paper Industry	84	PT. Pupuk Sriwidjaja Palembang (Pusri-IB)
5	PLN Pembangkitan Tanjung Jati B	25	PT. Indah Kiat Pulp & Paper, Tbk - Plant Tangerang	45	PT. INDONESIA POWER - PLTGU PRIOK POMU	65	PT. Nippon Shokubai Indonesia (ZAA)	85	PT. Pupuk Sriwidjaja Palembang (Pusri-IIB)
6	PT Angkasa Pura I (Persero) Cabang Bandara I Gusti Ngurah Rai Bali	26	PT. Indo Liberty Textiles	46	PT. INDONESIA POWER - PLTGU SEMARANG PGU	66	PT. Pabrik Kertas Tjiwi Kimia Tbk	86	PT. Pura Barutama Div. Paper Mill
7	PT Cemindo Gemilang Plant Bayah	27	PT. Indo-Rama Synthetics Tbk Divisi IRT	47	PT. INDONESIA POWER - PLTP KAMOJANG OMU	67	PT. Pertamina Hulu Energi ONWJ	87	PT. SALIM IVOMAS PRATAMA, Tbk - REFINERY - TANJUNG PRIOK
8	PT Chandra Asri Petrochemical (PE Plant)	28	PT. Indofood CBP Sukses Makmur Tbk Noodle Medan	48	PT. INDONESIA POWER - PLTU ADIPALA OMU	68	PT. Pertamina Refinery Unit IV Cilacap	88	PT. Salim Ivomas Pratama, Tbk - Refinery Surabaya
9	PT Chandra Asri Petrochemical (PP Plant)	29	PT. Indofood CBP Sukses Makmur TBK - Divisi Mi Instan Cabang Ancol	49	PT. INDONESIA POWER - PLTU BANTEN 1 SURALAYA OMU	69	PT. Petrokimia Gresik	89	PT. Semen Tonasa
10	PT Solusi Bangun Indonesia Pabrik Narogong	30	PT. INDOFOOD CBP SUKSES MAKMUR Tbk - Noodle Division Pekanbaru Plant	50	PT. INDONESIA POWER - PLTU BANTEN 2 LABUAN OMU	70	PT. Pindo Deli Perawang	90	PT. Semen Tuban
11	PT Solusi Bangun Indonesia Pabrik Tuban	31	PT. INDOFOOD CBP SUKSES MAKMUR Tbk DIVISI NOODLE BANDUNG	51	PT. INDONESIA POWER - PLTU BANTEN 3 LONTAR OMU	71	PT. PJB - Pembangunan Pacitan	91	PT. Solusi Bangun Indonesia Pabrik Cilacap
12	PT. Adaro Indonesia	32	PT. Indofood CBP Sukses Makmur Tbk, Divisi Mi Cabang Jawa Timur	52	PT. INDONESIA POWER - PLTU PANGKALAN SUSU OMU	72	PT. PJB - Pembangunan Tanjung Awar2	92	PT. Styrimdo Mono Indonesia Plant 1
13	PT. Amerta Indah Otsuka - Pasuruan	33	PT. Indofood CBP Sukses Makmur Tbk, Divisi Mi Instan Cabang Cibitung	53	PT. INDONESIA POWER - PLTU PELABUHAN RATU OMU	73	PT. PJB - UBJOM Indramayu	93	PT. Styrimdo Mono Indonesia Plant 2
14	PT. APAC Inti Corpora	34	PT. INDOFOOD CBP SUKSES MAKMUR TBK, Noodle Semarang	54	PT. INDONESIA POWER - PLTU SURALAYA PGU	74	PT. PJB - UBJOM Rembang	94	PT. Sunrise Bumi Textiles
15	PT. Asia Pacific Fiber Unit Karawang	35	PT. Indofood CBP Sukses Makmur, Tbk - Noodle Banjarmasin	55	PT. Indorama Petrochemicals	75	PT. PJB - UP Brantas	95	PT. YTL Jawa Timur
16	PT. Badak NGL	36	PT. Indofood Sukses Makmur Tbk. Bogasari Division, Plant Surabaya	56	PT. Indorama Polychem Indonesia	76	PT. PJB - UP Cirata	96	Sekretariat Jenderal Kementerian ESDM
17	PT. Chandra Asri Petrochemical Tbk. (Cracker Plant)	37	PT. Indofood Sukses Makmur Tbk., Divisi Bogasari - Pabrik Jakarta	57	PT. Indorama Polypet Indonesia	77	PT. PJB - UP Gresik	97	Star Energy Geothermal (Wayang Windu), Limited
18	PT. Cheil Jedang Indonesia - Pasuruan	38	PT. Indolacto - Purwosari	58	PT. Indorama Synthetics Tbk.	78	PT. PJB - UP Muara Karang		
19	PT. DIC Graphics	39	PT. Indonesia Asahan Aluminium	59	PT. Industri Karet Deli	79	PT. PJB - UP Muara Tawar		
20	PT. Ekamas Fortuna Malang	40	PT. INDONESIA POWER - PLTA MRICA PGU	60	PT. Ispat Indo	80	PT. PJB - UP Paiton		

ISO 50001

Energy Management System



**DIREKTORAT JENDERAL ENERGI BARU TERBARUKAN
DAN KONSERVASI ENERGI (EBTKE)**
Jujur, Profesional, Melayani, Inovatif, Berarti

[BERANDA](#) [PROGRAM KONSERVASI ENERGI](#) [PENGGUNA ENERGI](#) [INFORMASI & MEDIA](#) [PENGHARGAAN](#)

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SNI ISO 50001 - Sistem Manajemen Energi



ISO 14001:2015

Environmental management systems

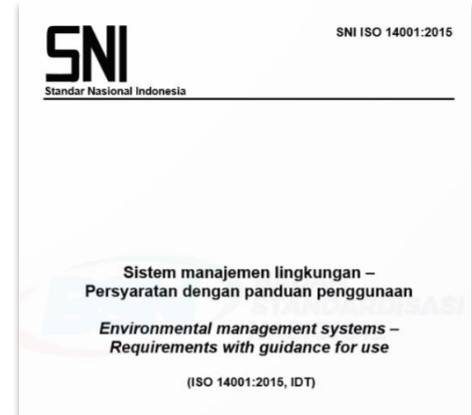
The number of companies implementing SNI ISO 14001 Certification was 2,125 in 2019

Environmental aspects:

1. Emissions to air
2. Releases to water
3. Releases to land
4. Use of raw materials and natural resources
5. Use of energy
6. Energy emitted (e.g. heat, radiation, vibration (noise), light)
7. Generation of waste and/or by-products
8. Use of space

Organization's activities, products and services:

1. Design and development of its facilities, processes, products and services
2. Acquisition of raw materials, including extraction
3. Operational or manufacturing processes, including warehousing
4. Operational and maintenance of facilities, organizational assets and infrastructure
5. Environmental performance and practices of external providers
6. Product transportation and service delivery, including packaging
7. Storage, use and end-of-life treatment of products
8. Waste management, including reuse, refurbishing, recycling and disposal.



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