Ekonomi Hijau Paska Pandemi: Tantangan dan Peluang

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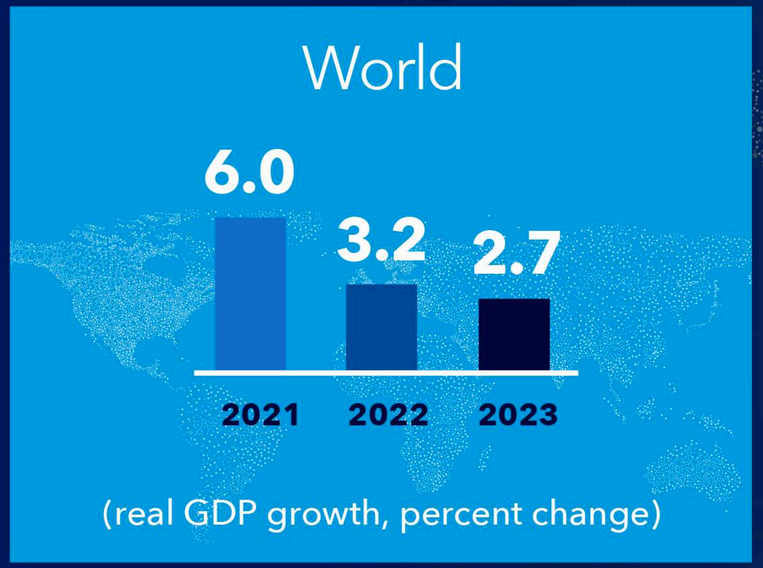
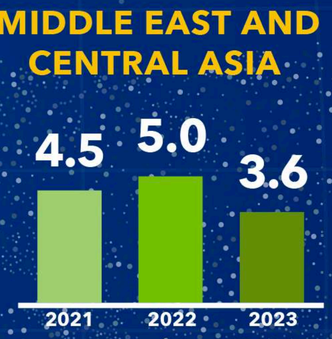
INDEF

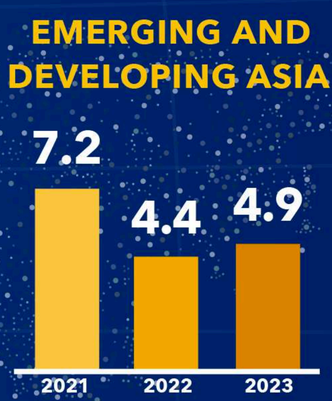
WORLD ECONOMIC OUTLOOK OCTOBER 2022

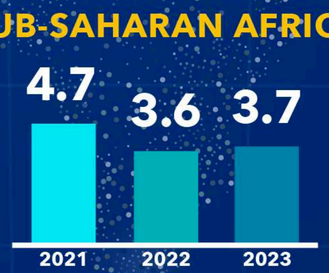
GROWTH PROJECTIONS BY REGION

(PERCENT CHANGE)





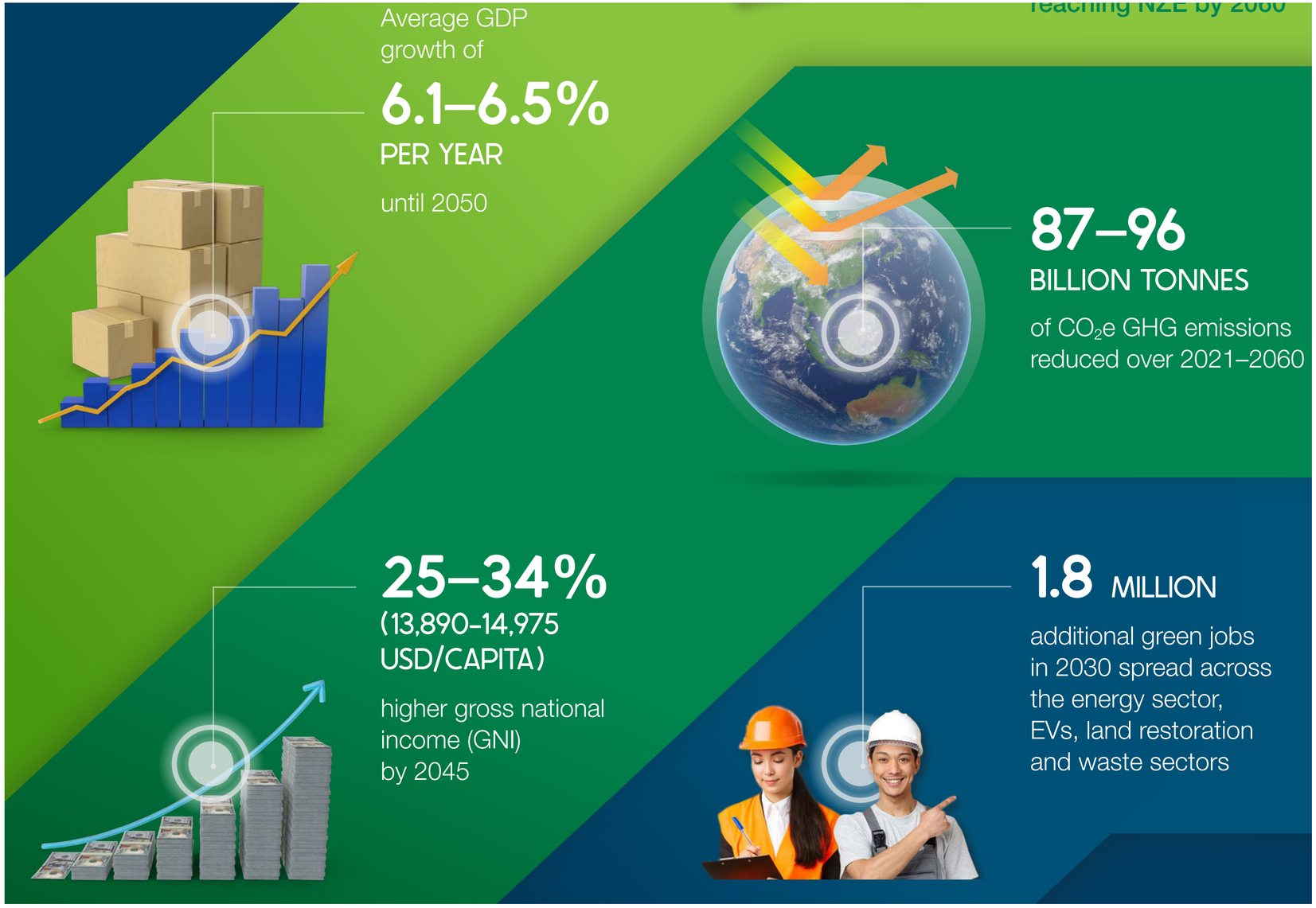




Source: IMF, *World Economic Outlook*, October 2022.

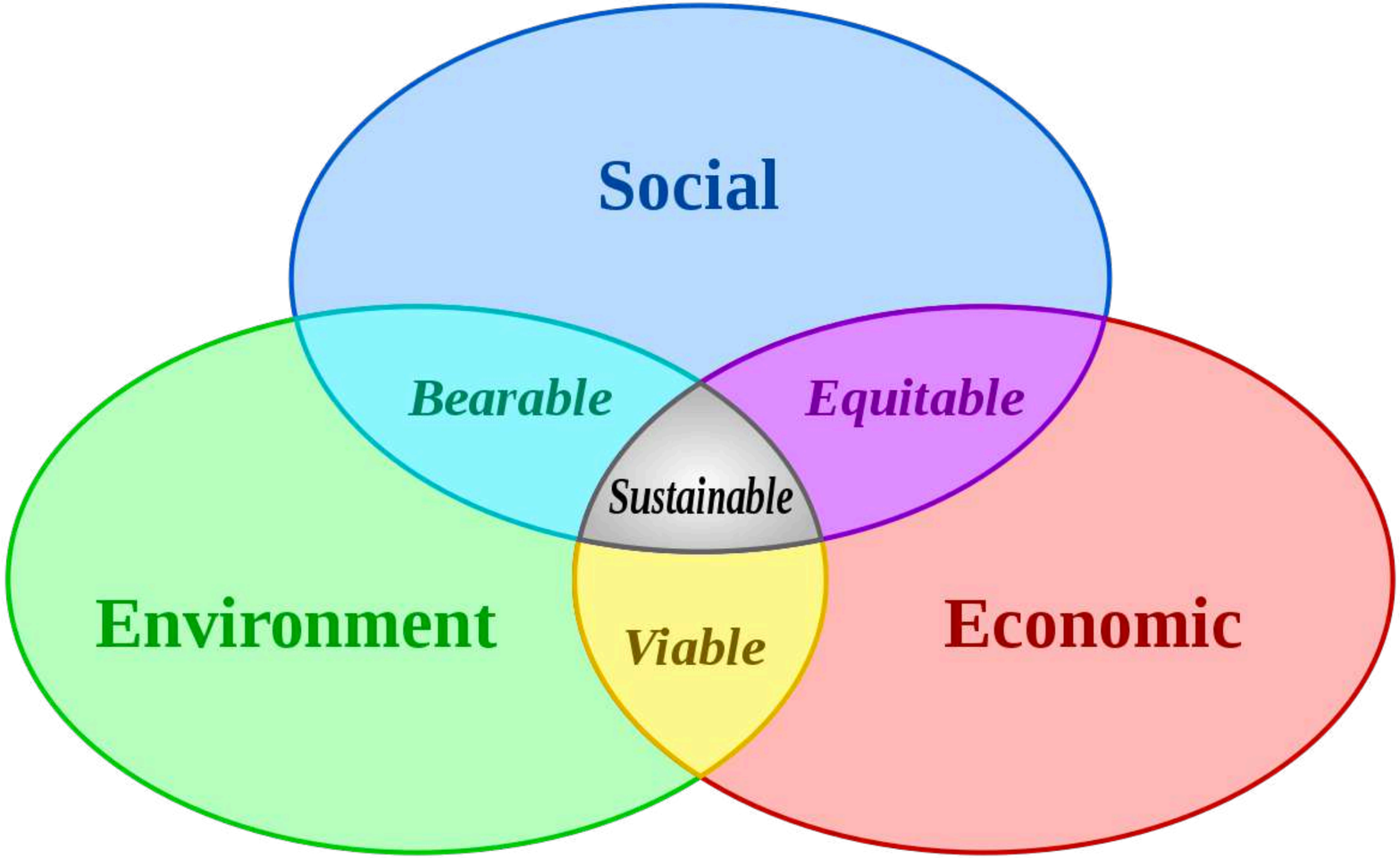
Note: Order of bars for each group indicates (left to right): 2021, 2022 projections, and 2023 projections.

Impact of Green Growth (Reduce emission 68 % in 2045 and NZE in 2060)



Source: Bappenas & LCDI (2022)

To be (sustainable) or not to be
That is the question (for developing country)



Give me sustainability, but not yet!

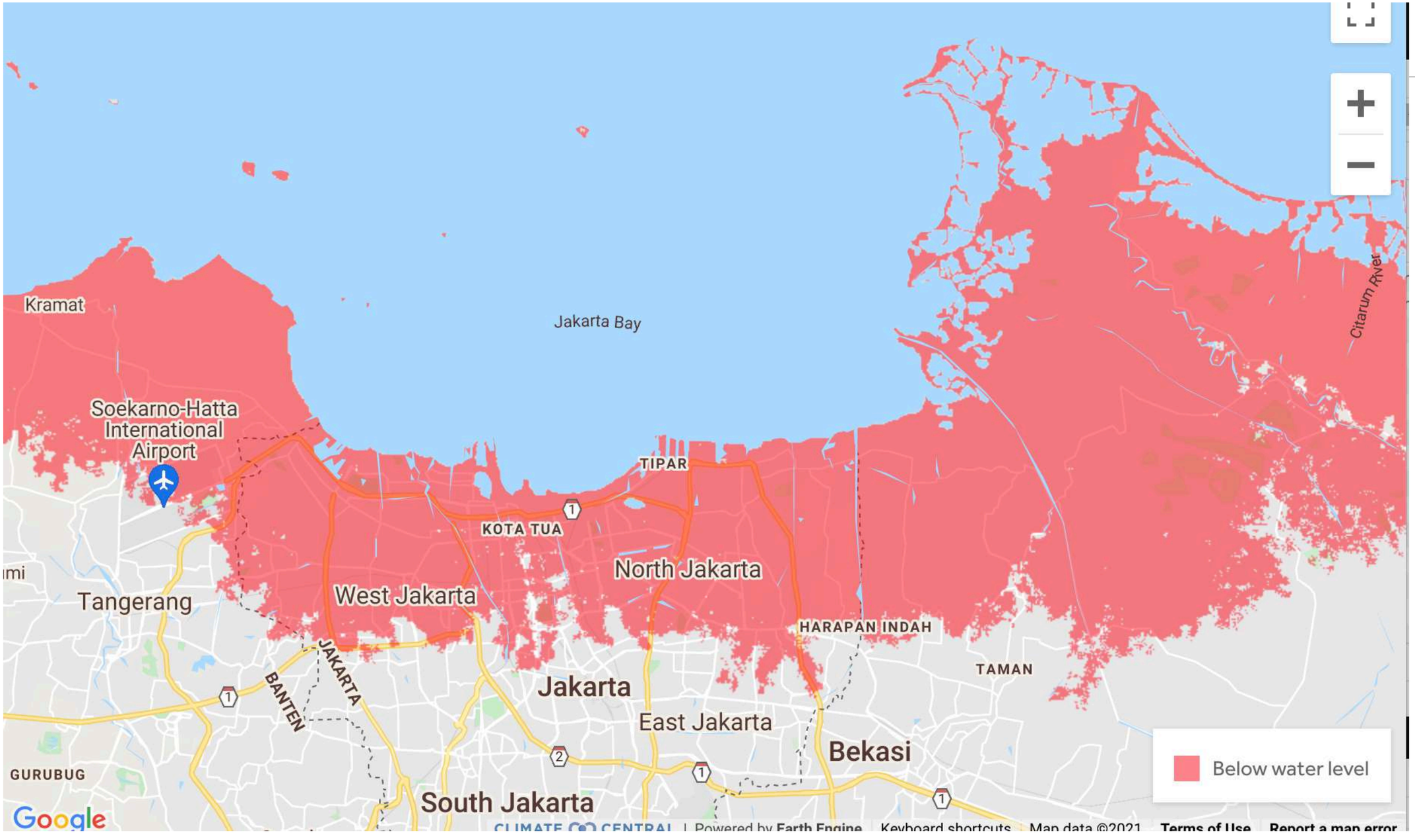
kepulauan + tropis = high risk climate crisis

Mayoritas bencana terkait krisis iklim

Effect of sea level rise 15 feet (5 m) to Indonesia

Source: https://coastal.climatecentral.org/

Effect of sea level rise 15 feet (5 m) to Jabodetabek



Source: https://coastal.climatecentral.org/

Effect of sea level rise of 25 feet (7,5 m) to Indonesia

Source: https://coastal.climatecentral.org/

Periode 2015-2020:
Total Emisi Indonesia rank #5 tapi naik 10,9 %

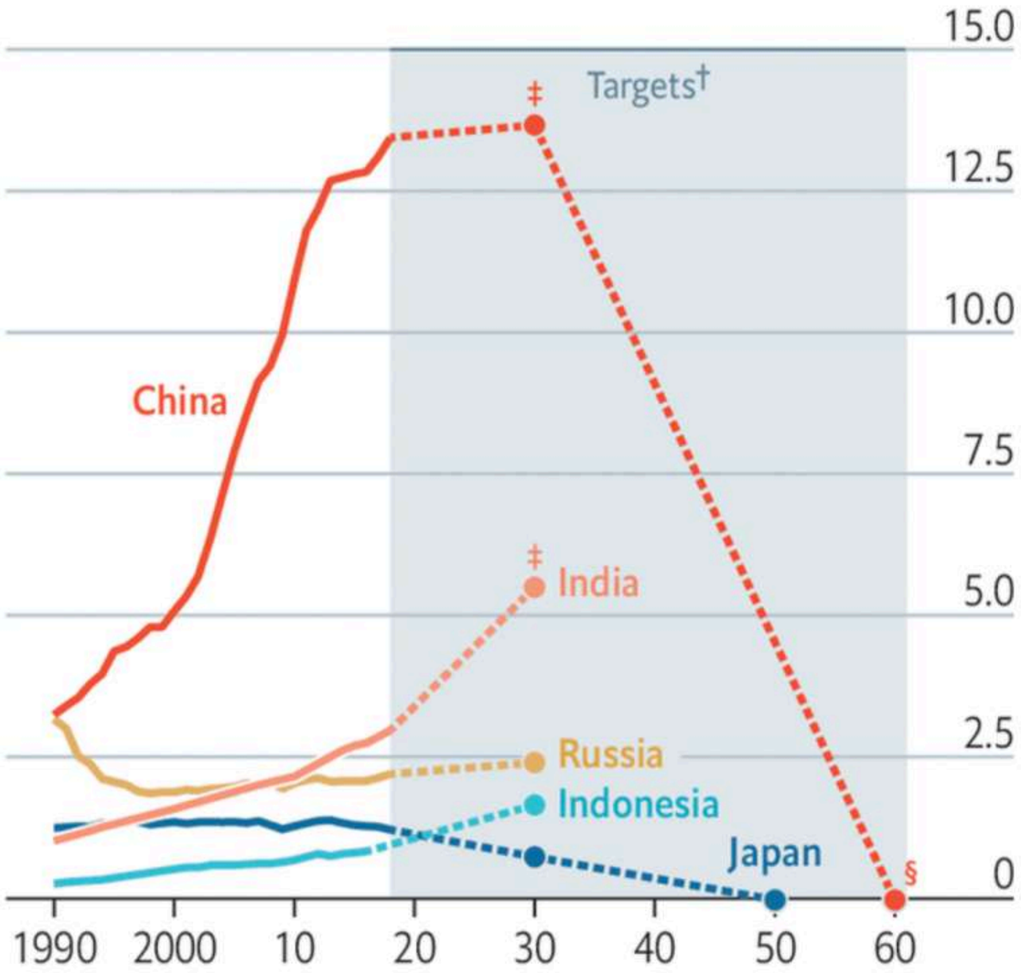
	COUNTRY	EMISSIONS EST.	PERCENTAGE CHANGE	EMISSIONS / CAPITA	GLOBAL
1	China	79.51 BT of CO2e	+5.84%	55.24 (+29.4%)	26.16%
2	USA	38.45 BT of CO2e	-5.42%	116.17 (+66.4%)	12.65%
3	India	22.03 BT of CO2e	+5.89%	15.96 (-59.1%)	7.25%
4	Russia	14.69 BT of CO2e	+0.01%	100.64 (+61.2%)	4.83%
5	Indonesia	8.23 BT of CO2e	+10.89%	30.10 (-22.8%)	2.71%
6	Japan	8.21 BT of CO2e	-5.05%	64.90 (+39.9%)	2.70%
7	Brazil	7.40 BT of CO2e	-2.12%	34.81 (-10.8%)	2.43%

Sumber: climatetrace.org

Heights to fear

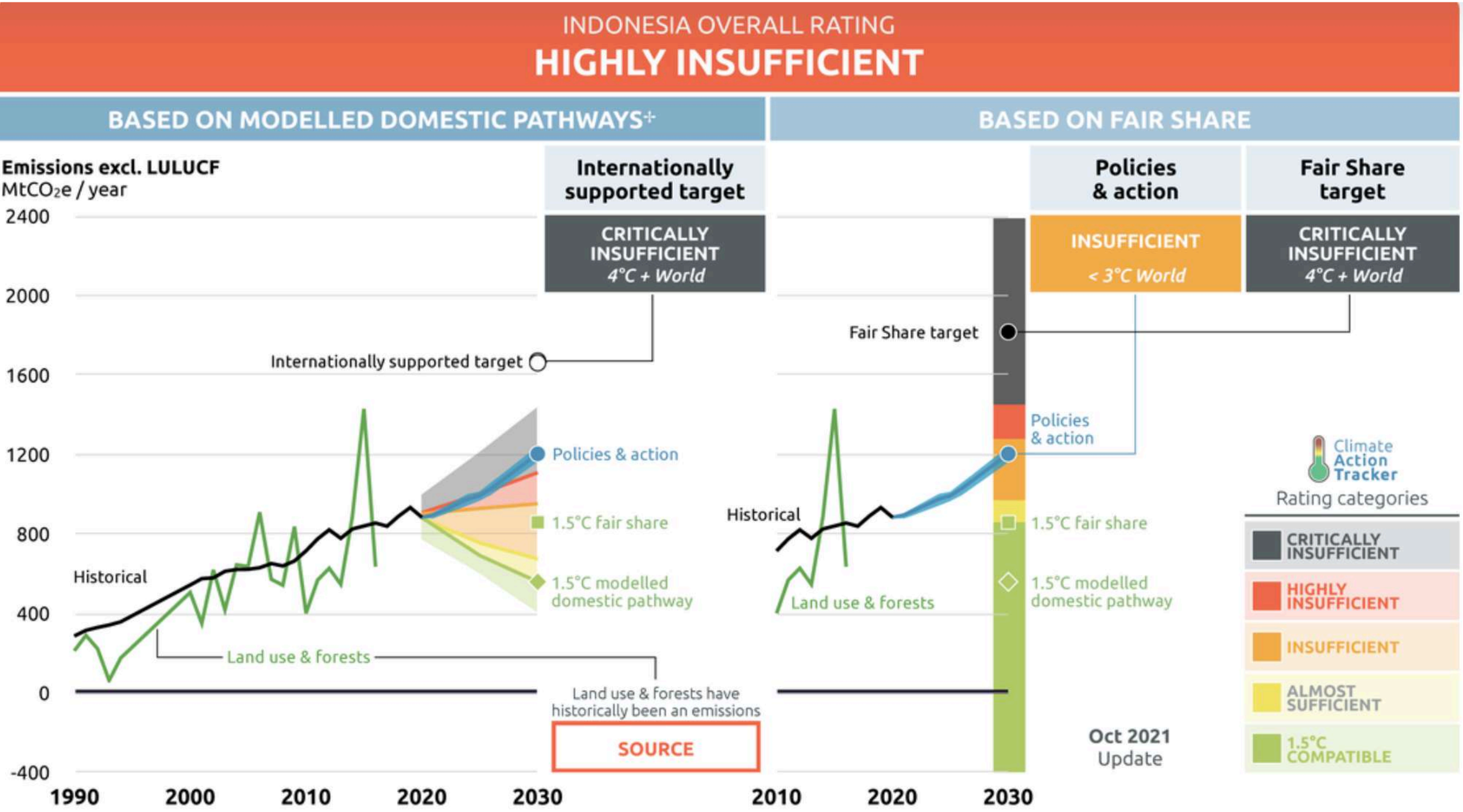
Greenhouse-gas emissions*

Gigatonnes of CO_2 equivalent



*Excluding forestry and other land use, except net-zero targets which include emissions removals from these sources †When target is a range, central estimate is shown ‡Multiple targets §Unclear if this targets CO_2 or all greenhouse gases Source: Climate Action Tracker

Business as usual (BAU) scenario: Indonesia overtake Russia soon



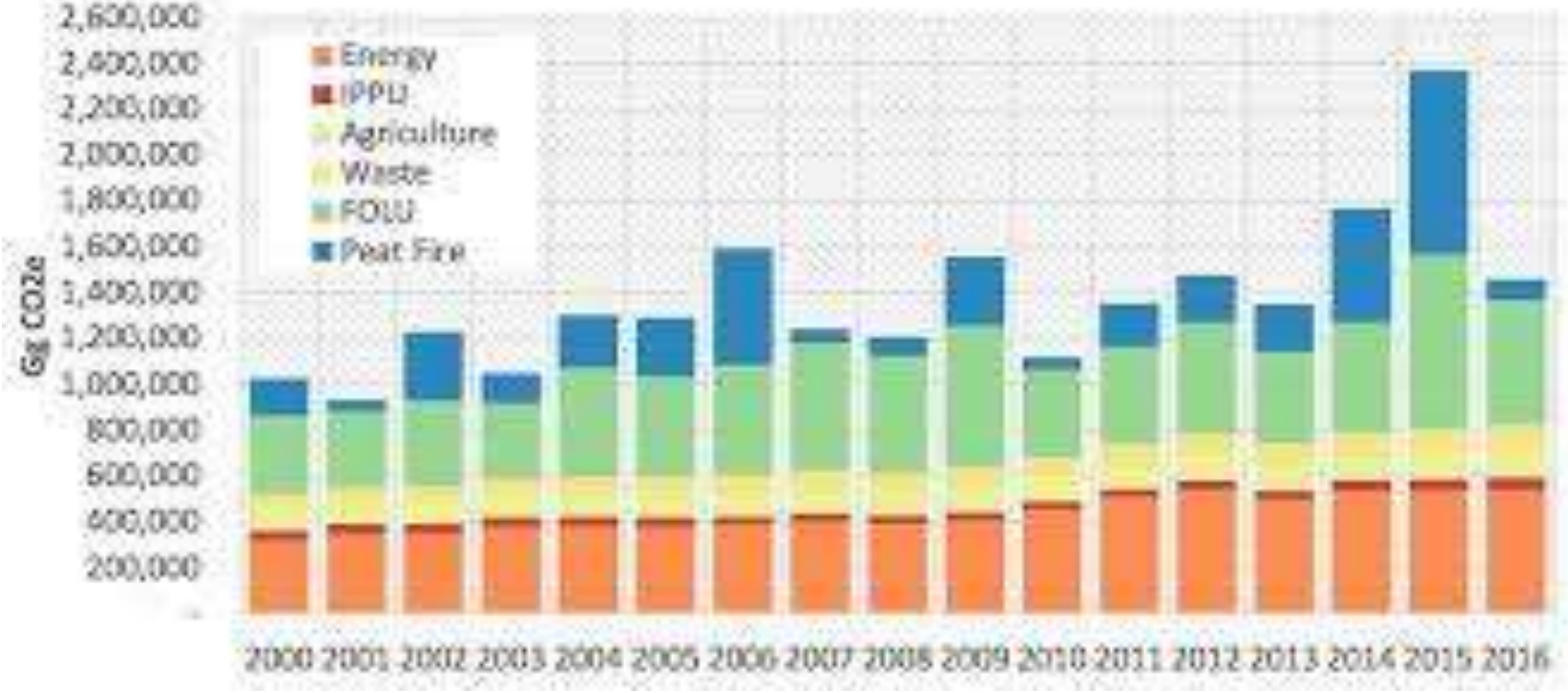
✢ Modelled domestic pathways reflects a global economic efficiency perspective with pathways for different temperature ranges derived from global least-cost models

Sumber: Climate Action Track

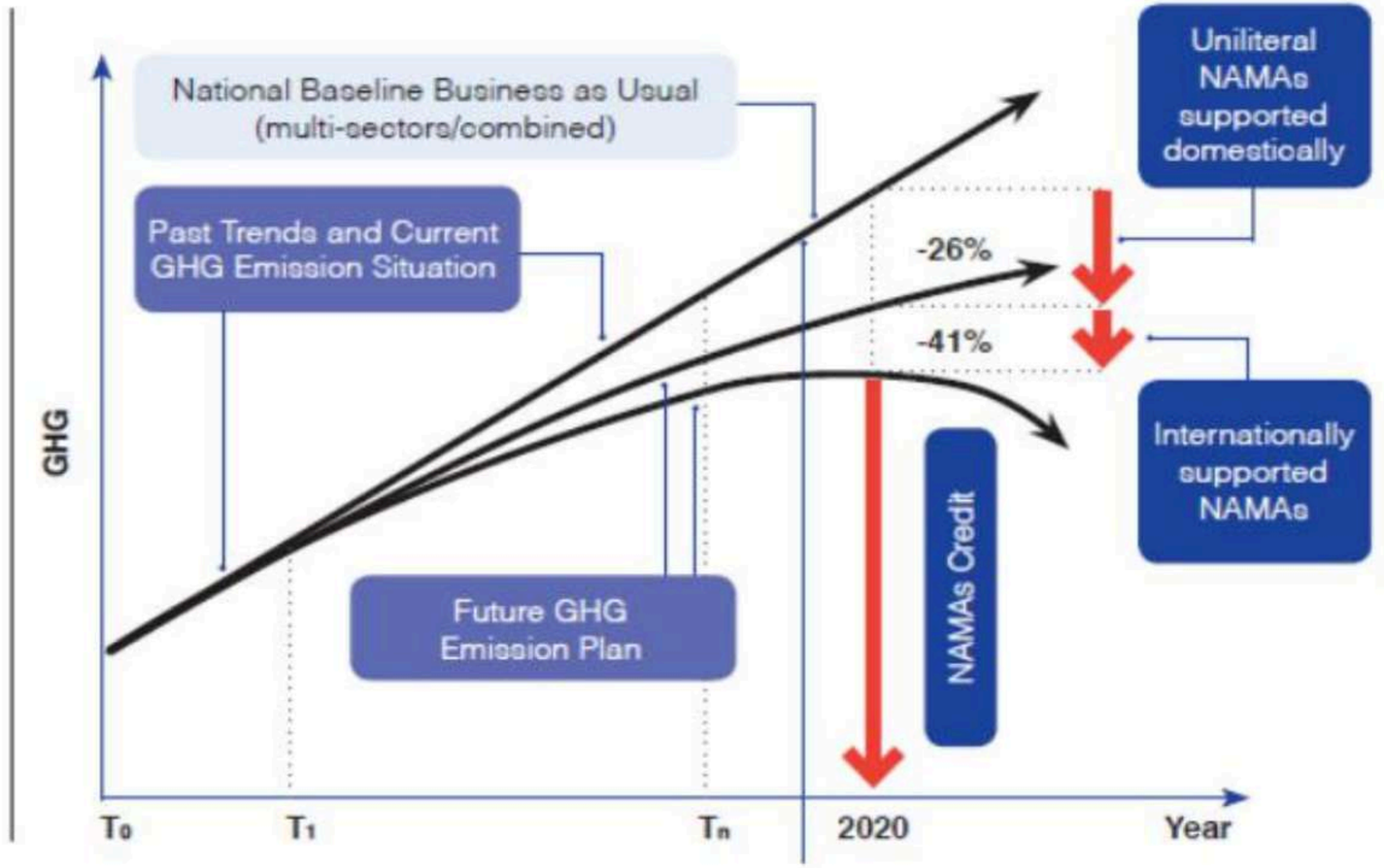
Kenapa Indonesia harus lakukan Transisi Ekonomi Hijau?

- Indonesia negara tropis dan kepulauan —> high risk to climate crisis (banjir, topan, sea level rise, kebakaran hutan, kekeringan dll)
- National interest turunkan climate crisis: *climate mitigation & proofing/adaptation*
- Menunaikan 3 (tiga) Janji Kemerdekaan:
  - Melindungi segenap bangsa dan seluruh tumpah darah Indonesia
  - Ikut melaksanakan perdamaian dunia
  - Meningkatkan kesejahteraan umum: migas & tambang non-renewable, hutan rusak, cuaca ekstrem & kekeringan/banjir —> krisis pangan dan pendapatan turun

Energy, Transport & FOLU dominate Indonesia emission



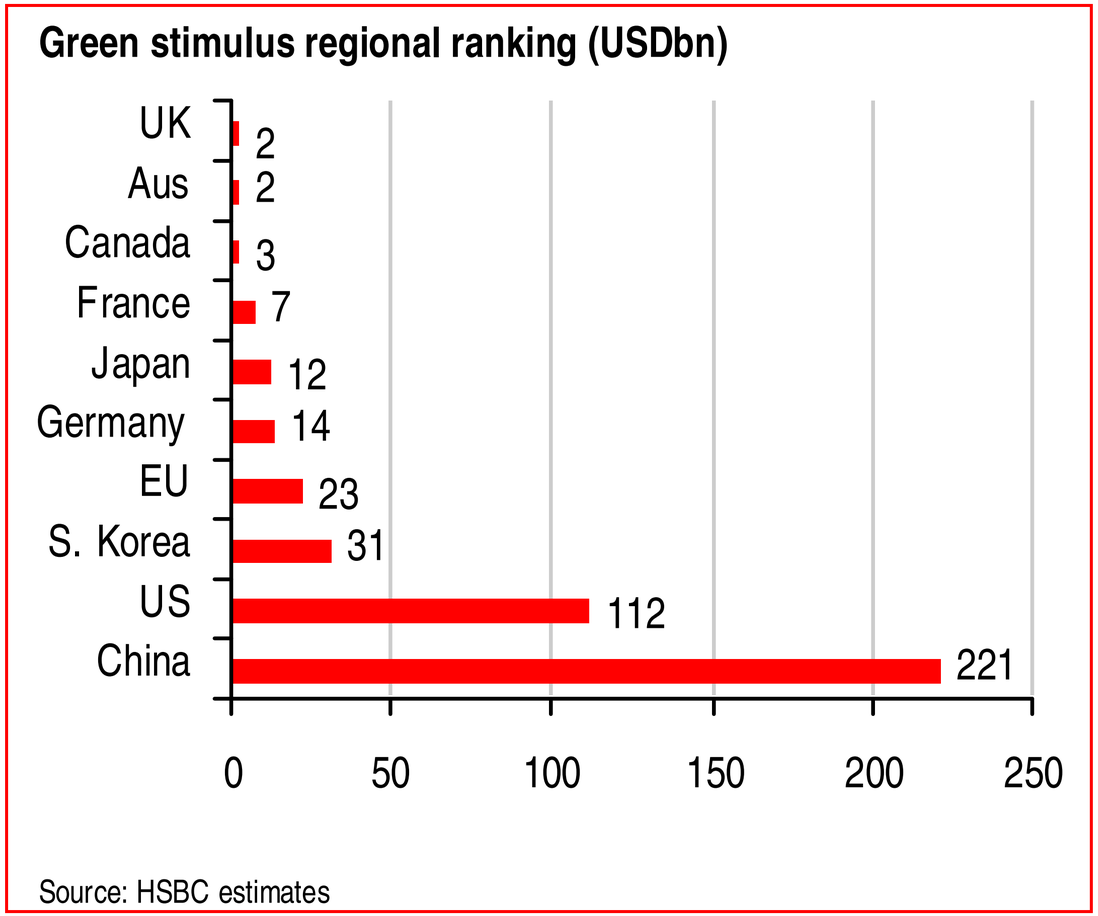
Indonesian GHG Emission Reduction Target in 2020

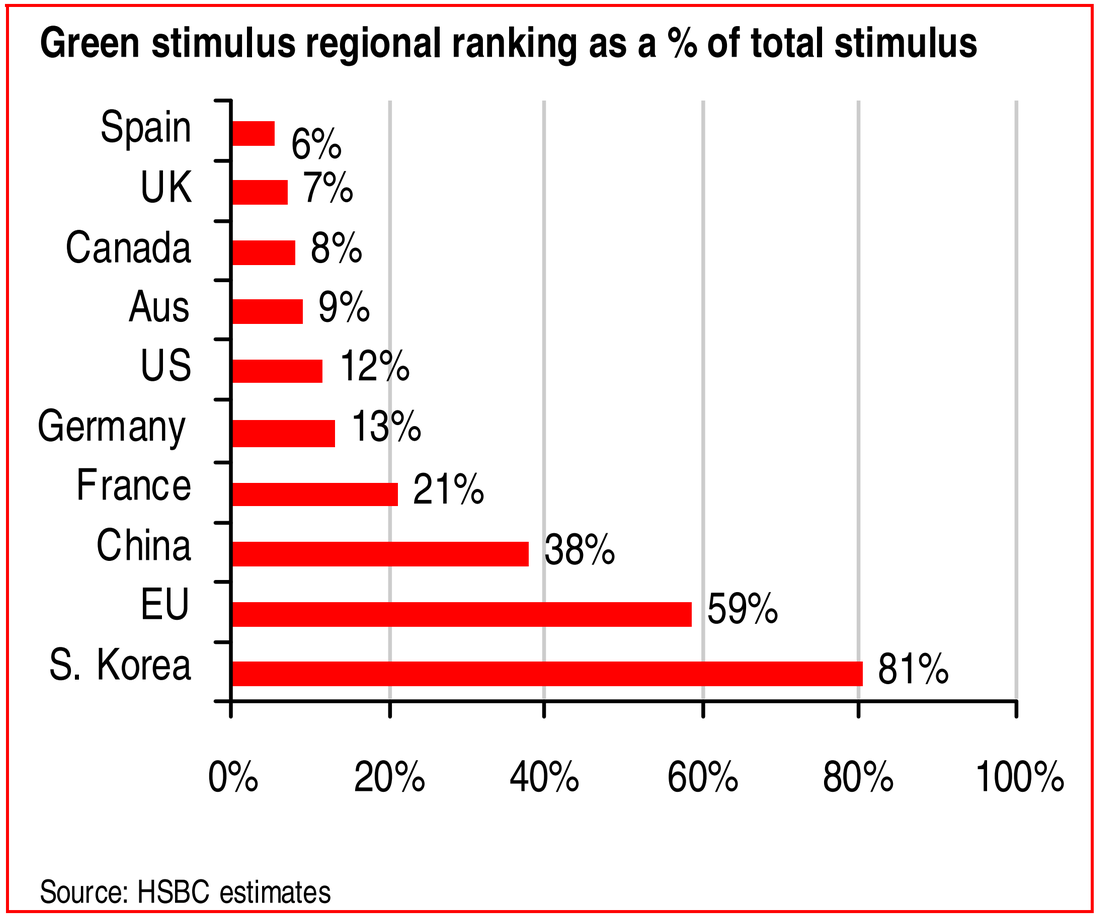


Source: Guideline for Implementing Green House Gas Emission Reduction Action Plan

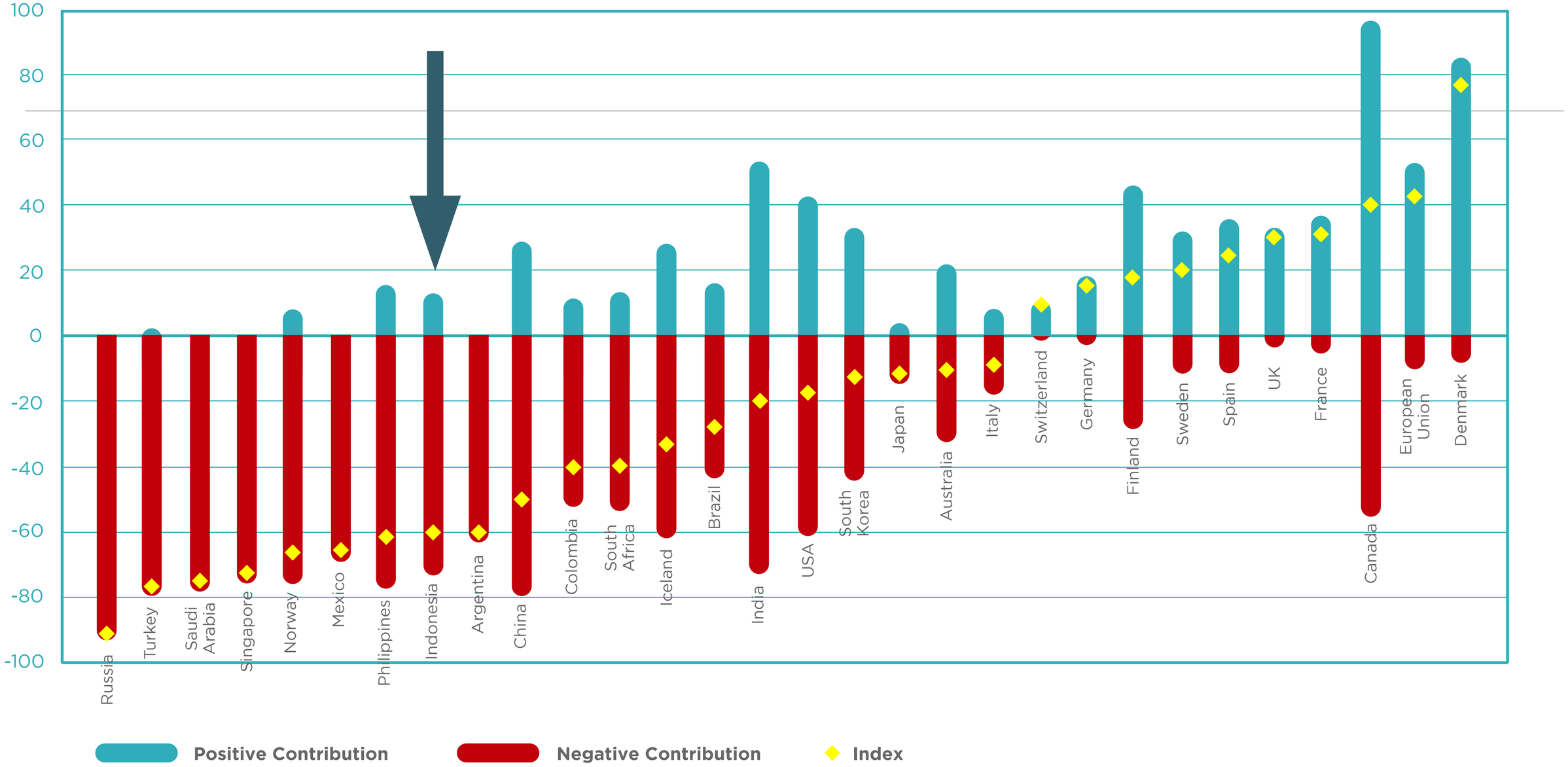
Committed at G20 meeting in Pittsburg 2009

2008 Sub-prime mortgage crisis respond were green



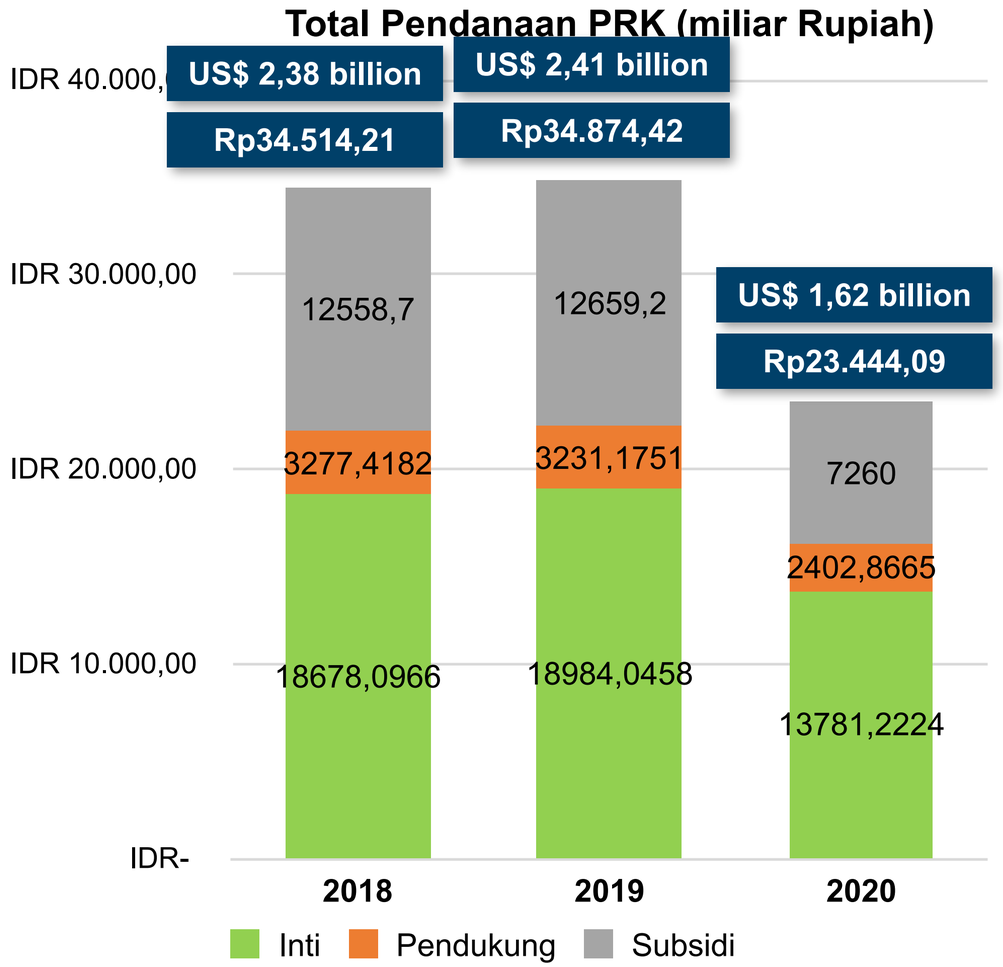


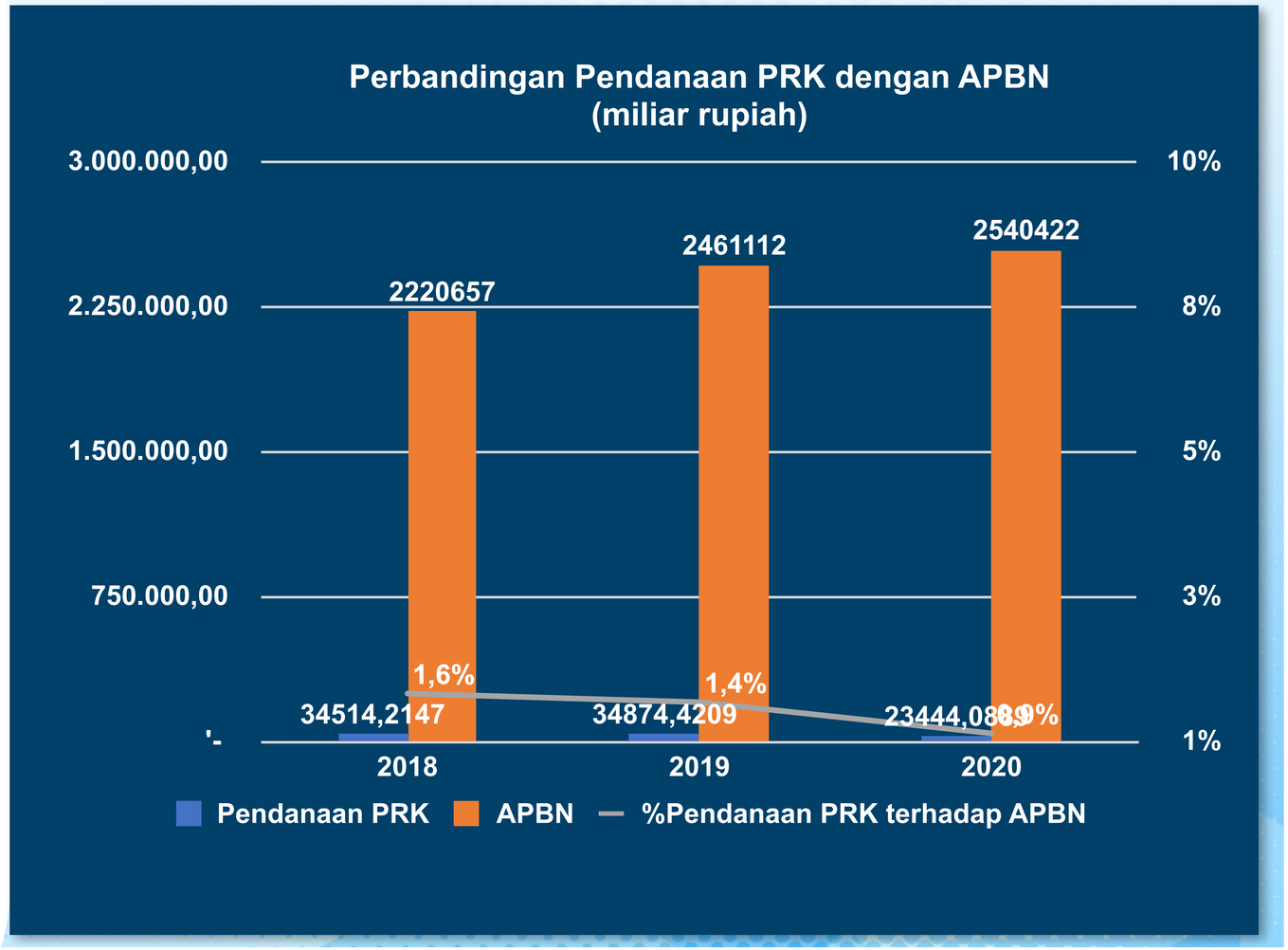
Indonesia Covid stimulus is not so green



Source: Vivid Economics using a variety of sources, consult Annex II for the entire list of sources
Note: Updated on 1 February 2021

GoI allocated 0,9 % - 1,9 % of national budget (APBN) for climate mitigation in 2018-2020

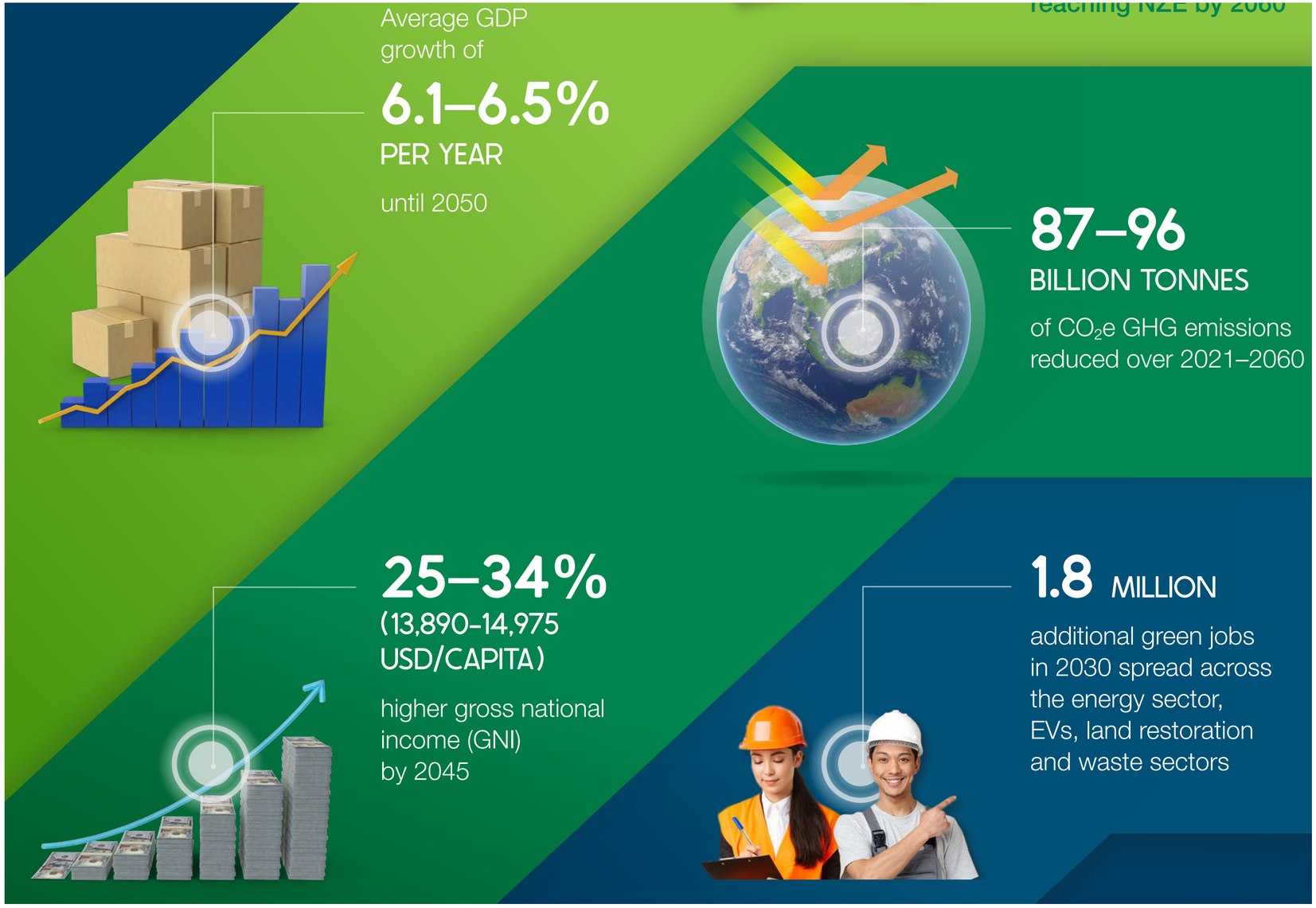




Source: Bappenas, INDEF & Smeru (2021)

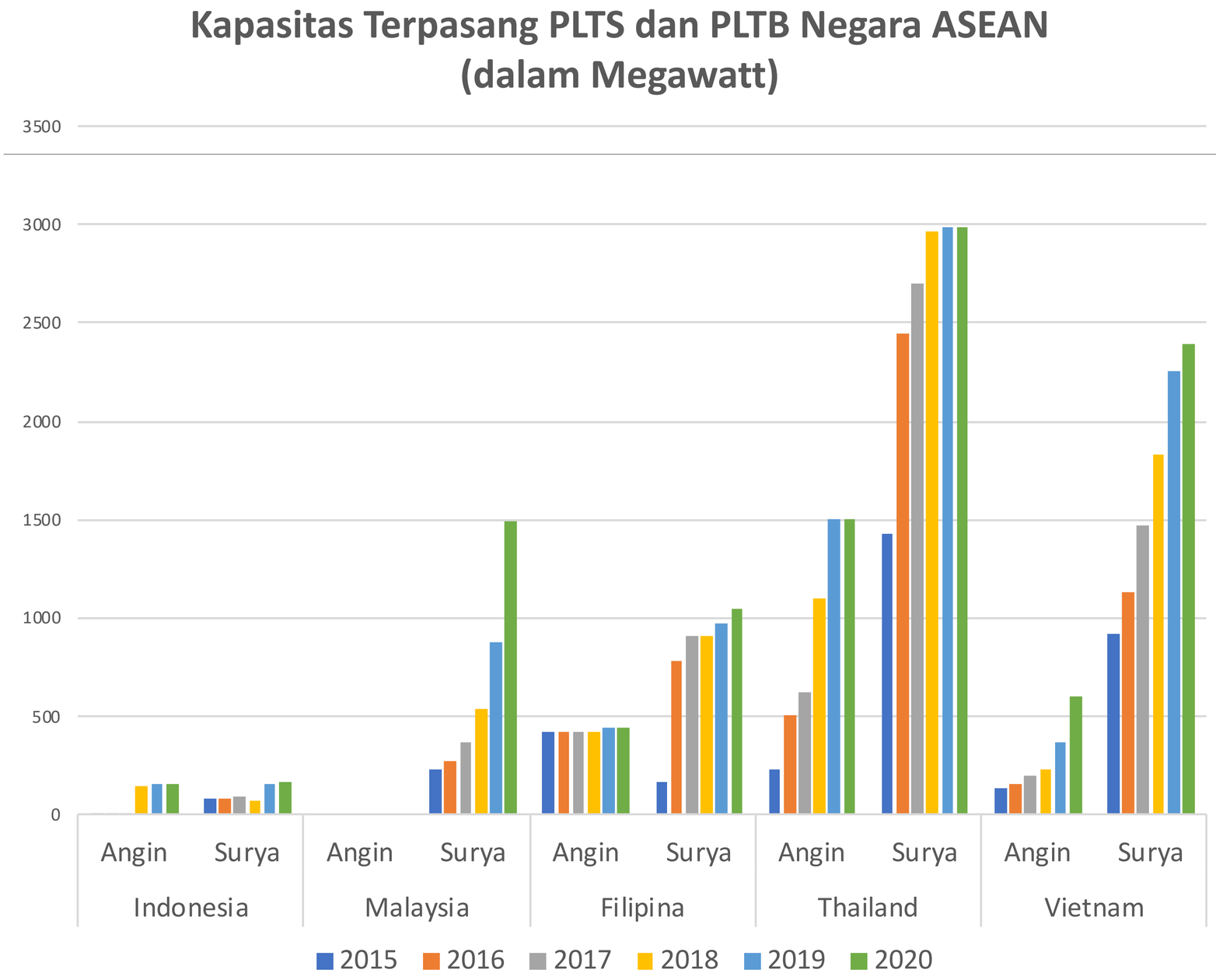
Economic, Social & Environmental in SDGs
—> Green economy

Impact of Green Growth (Reduce emission 68 % in 2045 and NZE in 2060)



Source: Bappenas & LCDI (2022)

Green Growth by Bappenas & LCDI (2022)

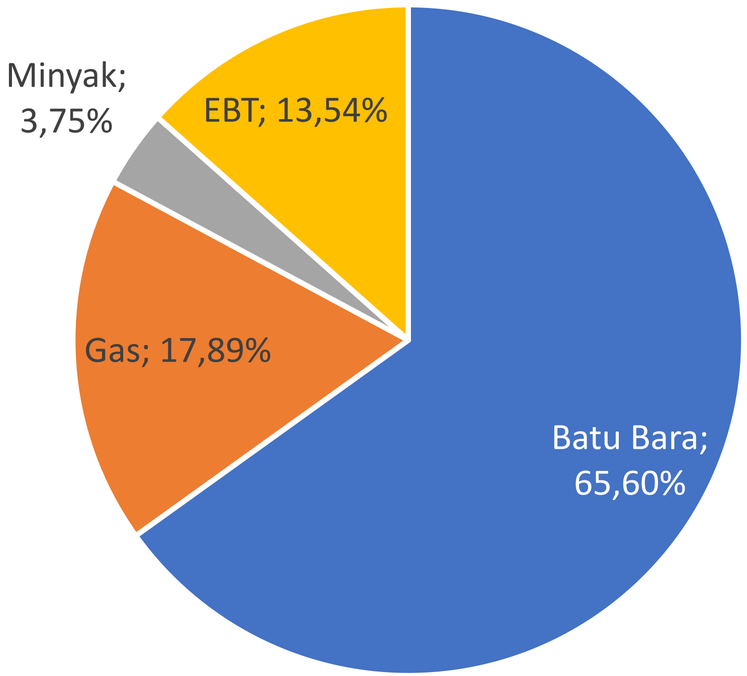


Kapasitas & Pertumbuhan Energi Terbarukan Indonesia rendah

Sumber: IRENA

Tinggi Potensi EBT,
Tinggi Fossil di Produksi Energi

Bauran Energi Indonesia, Agustus 2021



Sumber: Direktorat Jenderal Ketenagalistrikan, Kementerian ESDM (2021)

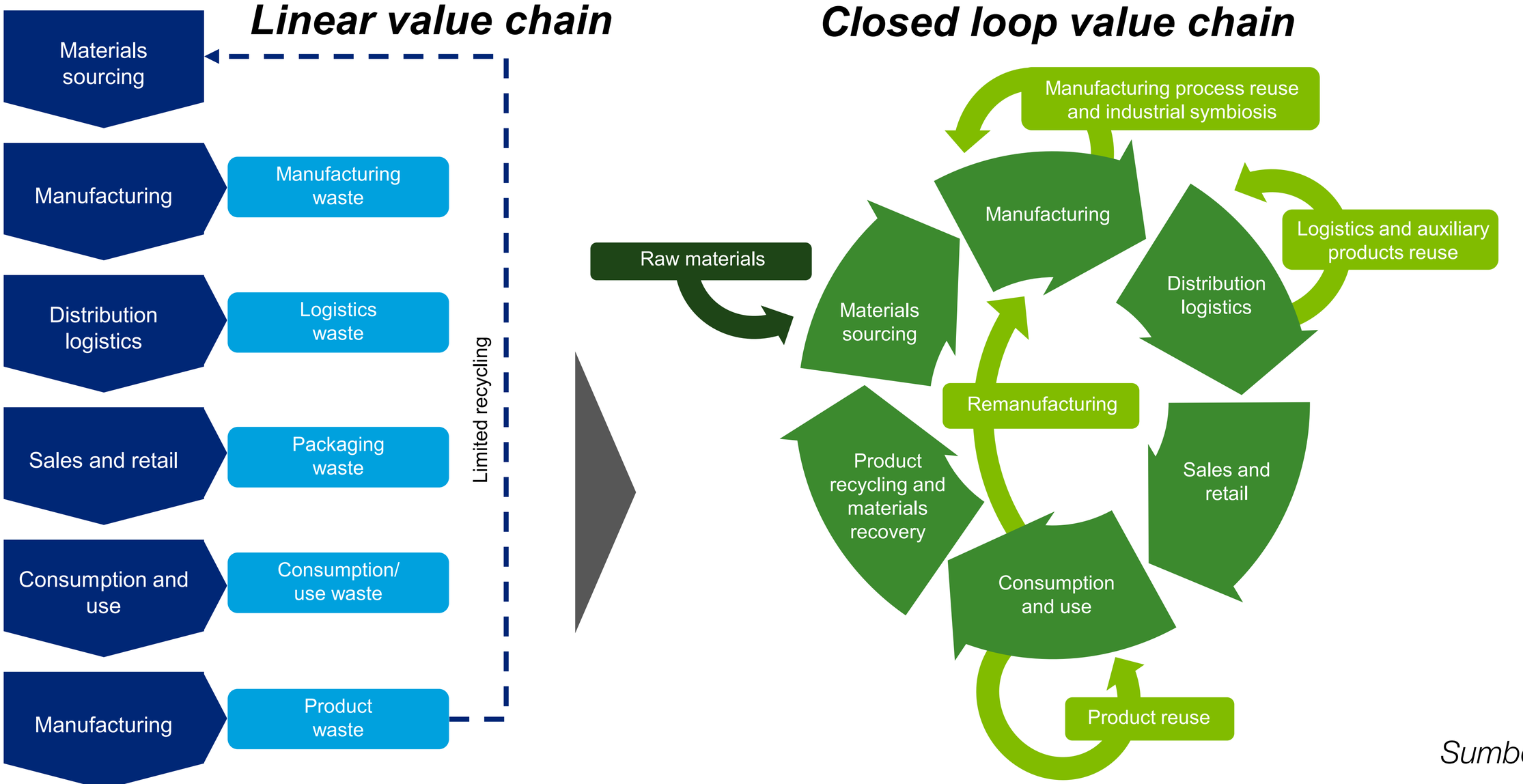
Potensi dan Pemanfaatan EBT Indonesia

Jenis	Kapasitas (gigawatt/GW)	Pemanfaatan (megawatt/MW)	Pemanfaatan (persen)
Surya	3.295	221	0,01
Hidro	95	6.660	7,01
Bioenergi	57	2.284	4,01
Bayu	155	154	0,10
Panas Bumi	24	2.293	9,55
Laut	60	0	0

Ket: Realisasi Juni 2022

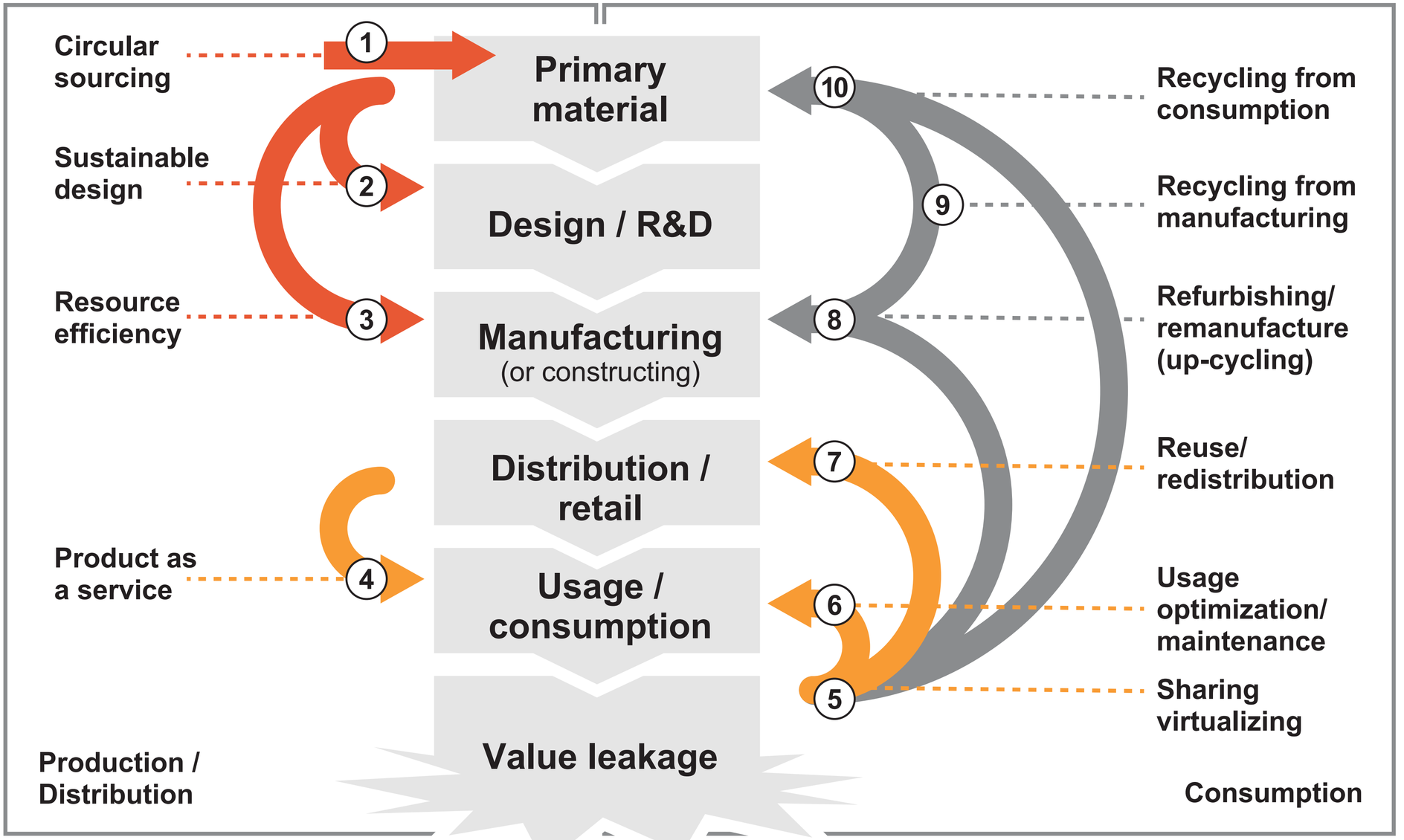
SUMBER: RUPTL PLN

Linear vs Circular Economy



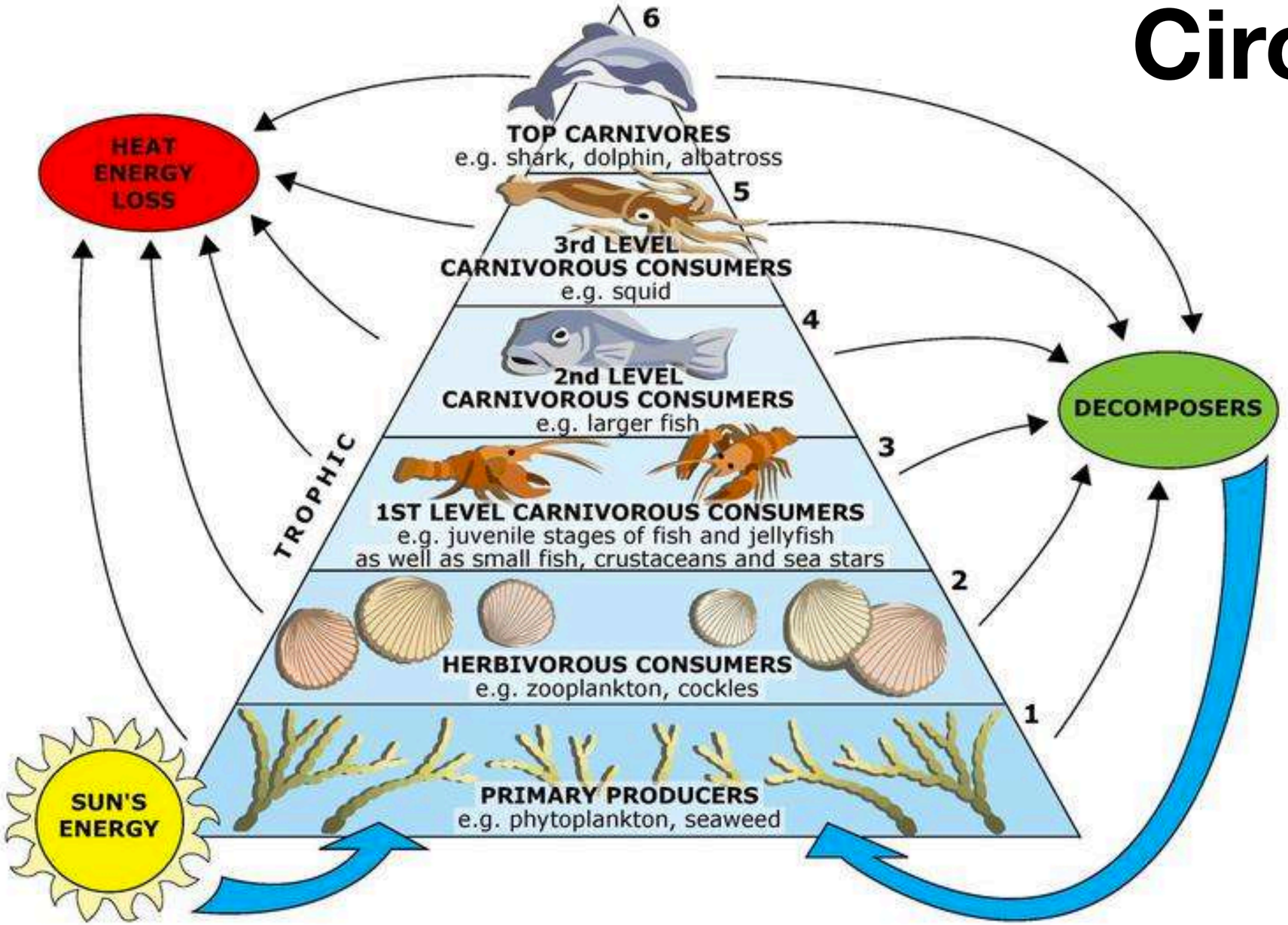
Sumber: Deloitte

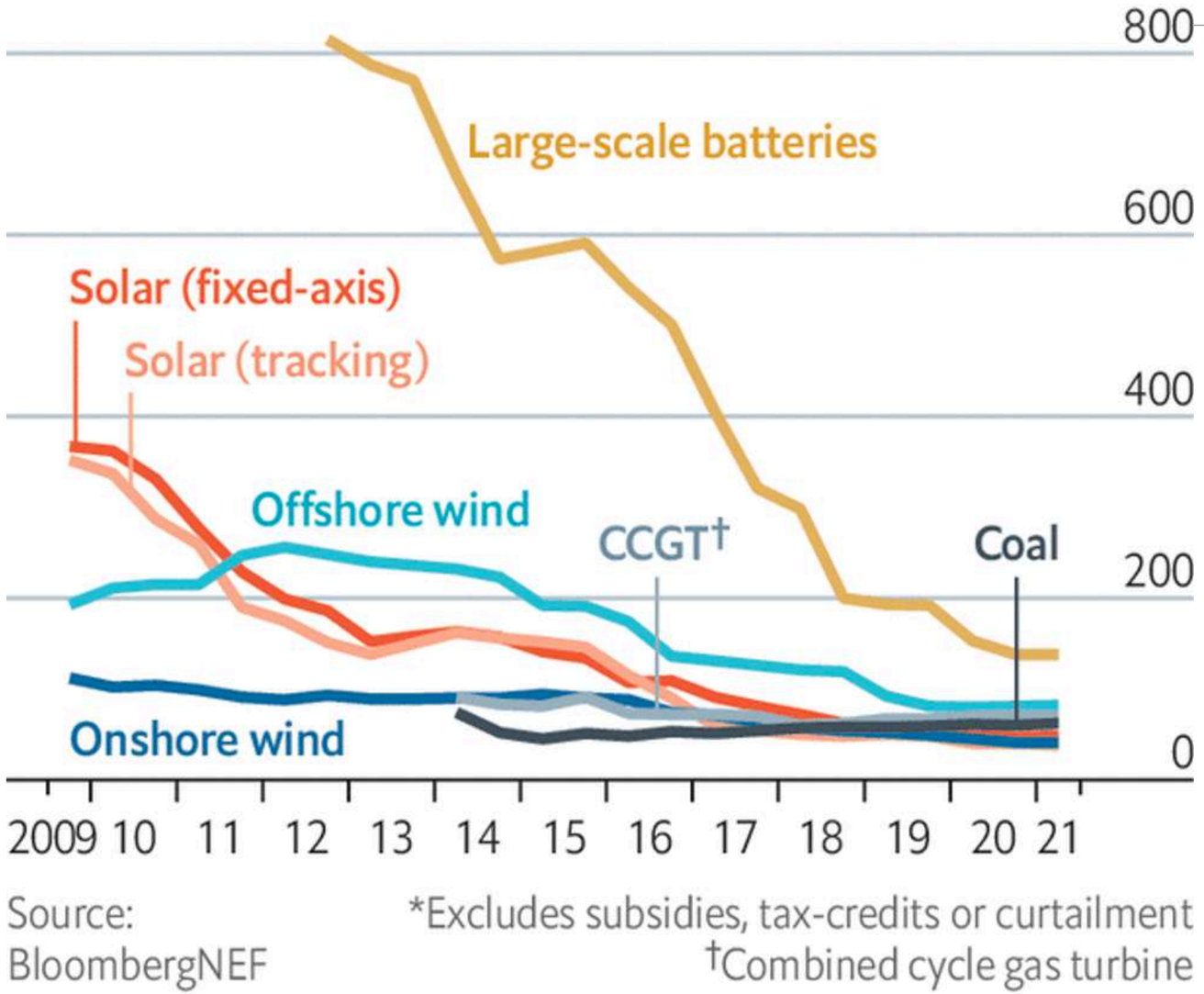
10 Strategies for Circular Economy



Sumber: PWC (2019)

Circle of Life





Decrease Cost of Renewable Energy: Opportunity for energy transition

Coal skyrocted in 2022: More expensive than Renewable if not for DMO and DPO

Batu Bara: mahal dan polutif

Challanges of Green Growth

- Low fund: Government and financial sector
- Forest & Land use change (alih fungsi lahan hutan)
- High existing fossil fuel based power plant
- Low Public Awareness & Priority
- Short time window before > 1,5 celcius increase

Opportunites and Options for Green Growth in Indonesia

- Protection and limit to land use change
- Green policy & regulation
- Green Finance & Invest: de-risking, VGF
- Green Business: ESG, green disclosure & reporting, certification/labeling
- Green Energy and Transport
- Green awareness & collective action

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