



Environment, Social & Governance

Human Resources for Sustainability

Presented by:

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Secretary General, Ministry of Human Resources



Sessionn I: 22nd August 2023



MATRADE Hall,
MATRADE Exhibition & Convention Centre



MALAYSIA MADANI

Environment, Social & Governance

Human Resources for Sustainability

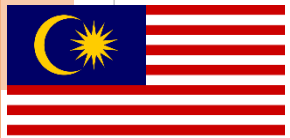
ZAINI UJANG DSc, PhD, PE (M'sia) CEng (UK), FIEM, FIWA (UK), FCIWEM (UK), FIChemE (UK)

Former Vice-Chancellor, and Professor of Environmental Sustainability, UTM

Secretary General, Ministry of Human Resources, Malaysia

12:30pm. 22 August 2023 . **Forum ESG** Kuala Lumpur





Malaysia's Nationally Determined Contribution (Revised NDC)

(Updated Submission 30.7.2021)

Malaysia intends to reduce its economy-wide carbon intensity (against GDP) of 45% in 2030 compared to 2005 level:

- The 45% of carbon intensity reduction is unconditional;
- This target is an increase of 10% from the earlier submission;
- The GHG coverage is expanded from three (3) to seven (7) GHGs:
 - Carbon dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous oxide (N₂O)
 - Hydrofluorocarbons (HFCs)
 - Perfluorocarbon (PFCs)
 - Sulphur hexafluoride (SF₆)
 - Nitrogen trifluoride (NF₃)



United Nations
Framework Convention on
Climate Change

<https://www4.unfccc.int/sites/MalaysiaFirst/PDF>

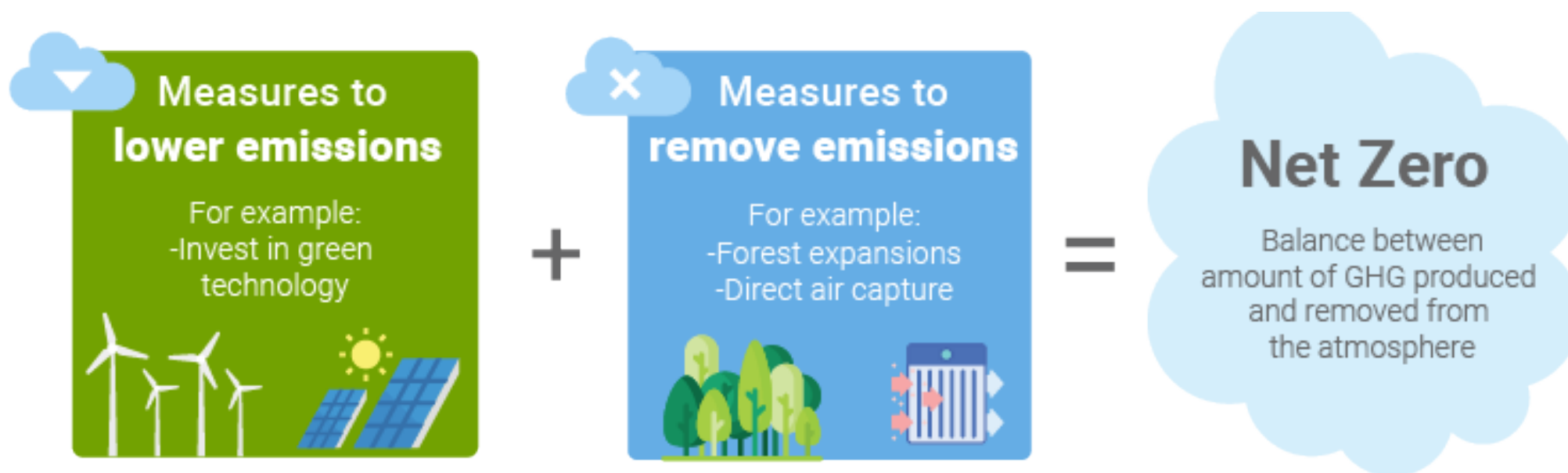
malaysia's update of its first - UNFCCC

Malaysia hereby communicates its updated NDC in accordance with paragraph. 24 of decision 1/CP.21 to contribute to the implementation and achievement of the.

BUR4 Malaysia



Net-Zero GHG



Green Electricity Tariff

- Energy generation
- Transportation
- Industrial processes
- Waste disposal

80%

- Carbon capture and storage
- Land Use and Land Use Change and Forestry - Removal

Green Water Tariff

- Agriculture
- Land Use and Land Use Change and Forestry (LULUCF) - Emission

Human Resources for Climate Sustainability

INDIVIDUAL

- Understanding the climate change
- Adopt **ECO-SHIFT** and green lifestyle
- Reduce carbon emission
- Increase carbon sinks
- Be climate advocate

ORGANISATIONAL

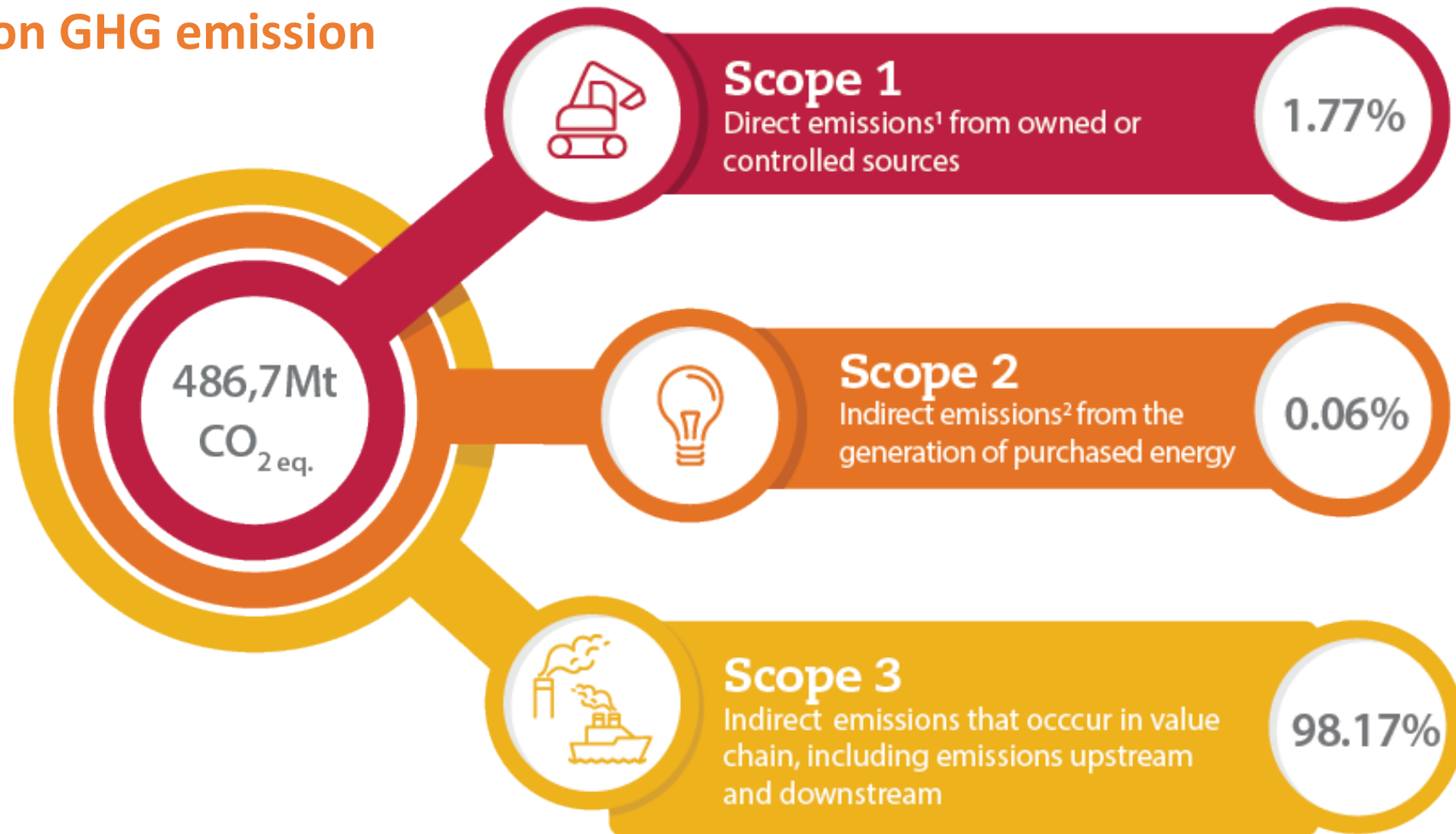
- Climate policy
- Adopt ESG (Environment, Social and Governance) framework
- Reduce carbon emission
- Increase carbon sinks
- Be climate advocate

Three pillars of ESG



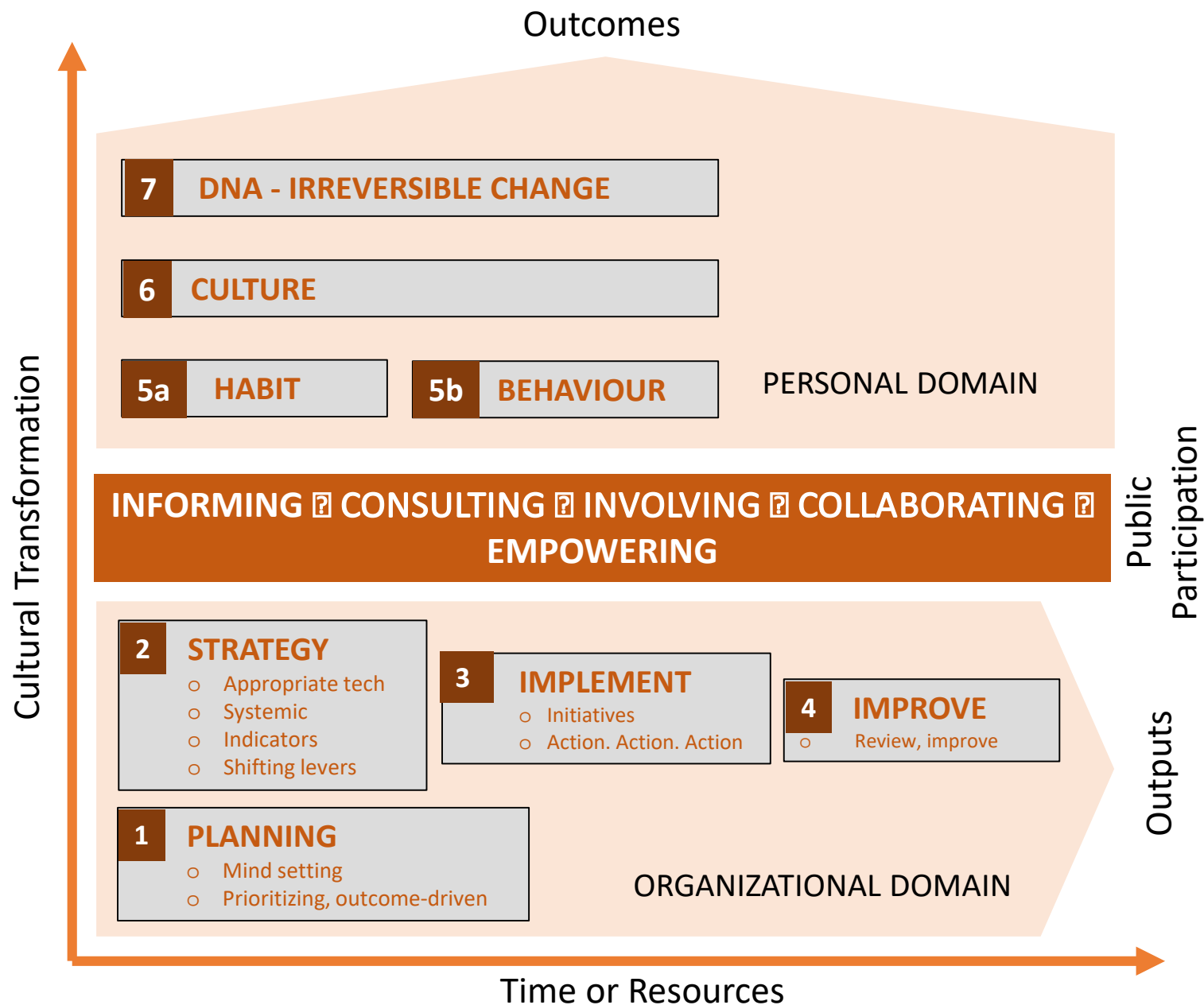
Example:

ESG of Vale on GHG emission

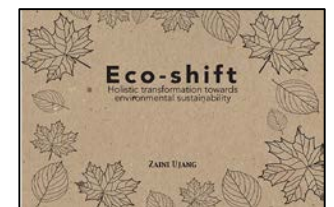
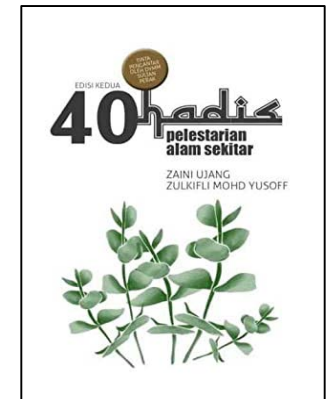


¹ Direct emission from owned or controlled Vale operation.

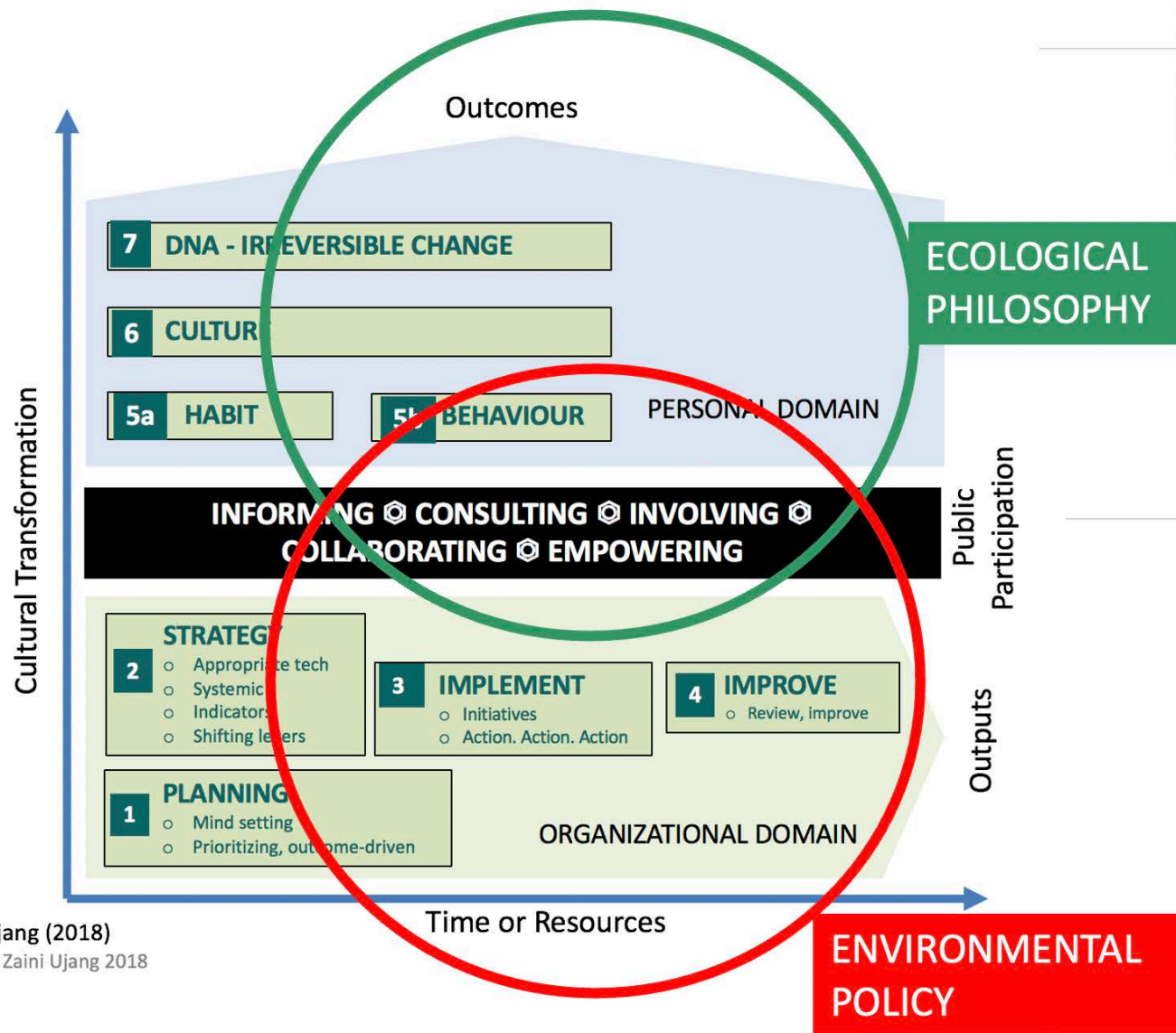
² Indirect emissions from purchased energy.



Eco-shift[©]
7 Ecoshift Framework



By Zaini Ujang (2018) pp.103



By Zaini Ujang (2018)
Eco-Shift by Zaini Ujang 2018

ECOSHIFT framework

ECOSOPHY

Western	Islamic	Japanese
Carbon footprint	Halallan tayyibah	Mottainai
Green growth	Khalifah	Kaizen
Lifestyle	Ihsan	Kami
Values	Taqwa	Wa
Holistic	Ibadah	Ikigai

ENVIRONMENTAL POLICY

Performance

KPI
Budget spending
Ratings
Index etc.

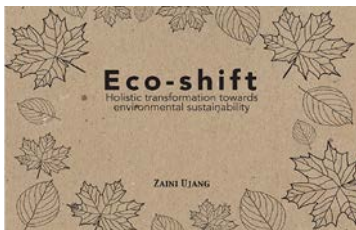
Progress on sustainability after the World War II

By Zaini Ujang (2018)

	Sustainability.1 <1970	Sustainability.2 1970-90	Sustainability.3 1990-2020	Sustainability.4 >2020
Focus	Pollution episodes	Environmental control	Ecological risks	Carbon footprint
Growth	Development vs Ecosystem	Development >> Ecosystem	Development << Ecosystem	Green growth
Governance	Self-awareness	Regulatory	Systemic	Lifestyle
Infrastructure	Economic-driven	Economic-growth	Socio-economic-driven	Value-driven
Framework	End-of-pipe	Regulated process	Clean technology	Holistic

SDG Index

ESG compliance



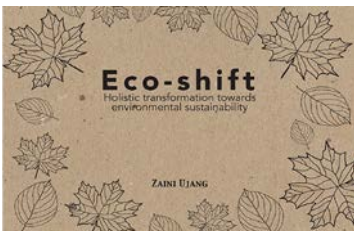
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ENVIRONMENTAL POLICY

ENVIRONMENTAL PHILOSOPHY



France, Netherlands, Belgium: Which European countries have the best cycle to work schemes?



CYCLING TO WORK?

- Reduce urban air pollution
- Reduce traffic congestion
- Less investment in public transportation
- Less GHG emission
- Healthy workforce
- Green economy
- ESG

What's new in Belgium on the employment front, Part 2 – rolling out the biking allowance

By [Marga Caproni](#) on March 10, 2023

POSTED IN [DATA PROTECTION](#), [EMPLOYEE WELFARE](#), [EMPLOYMENT CONTRACTS](#), [MONITORING](#), [TAX](#)

Joint Committee	Allowance	Minimum distance	Maximum distance
200 (Mixed)	0.20 €/km		40 km
118 (Food – blue-collars) 220 (White-collars)	0.24 €/km	/	/
140.3 (Logistics – blue-collars) 226 (White-collars)	0.24 €/km	1 km	/
111 (Metal works – blue-collars) 209 (White collars)	0.18 €/km		7.2 € per day A minimum of 1 € per day applies for a distance of less than 5 km

Although we are not quite at the level of the Dutch (the Dutch will cycle to their own wedding, so to speak), using the bike for the daily commute has become increasingly popular in Belgium in recent years, especially with the rise of e-bikes and speed pedelecs. Employers are already obliged to contribute to their employees' public transport costs and a number of sectors had included travelling by bike in the list of means of transport qualifying for such support.

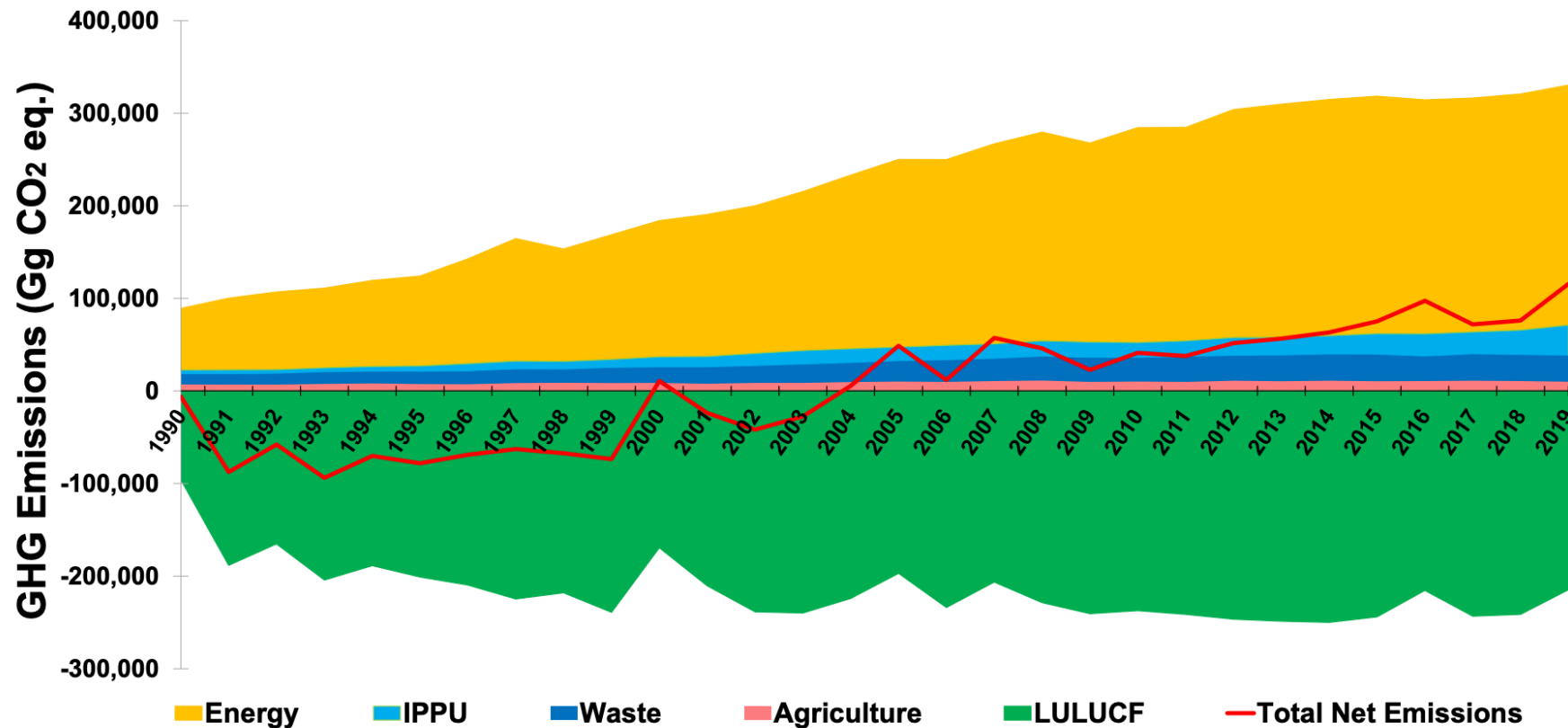
On January 24 this year the social partners of the National Labour Council signed a collective agreement (CLA No. 164 or “**the CLA**”) to extend this provision across all sectors and so to provide a positive cash incentive to take to 2 wheels (and presumably also 1 or 3, depending on your skill level and just how foolish or weird you are prepared to look for the good of the environment). The bicycle allowance is EUR 0.27 per kilometer ridden and is exempt from taxes and social security contributions. This amount will change annually roughly in line with inflation. The compensated distance is limited to 20 kilometers each way. The allowance is paid every month in arrears together with the employees' wages.

MALAYSIA: GHG Emissions for 1994, 2000, 2005, 2011, 2014, 2016, 2019

Sector	Emissions/Removals (Gg CO ₂ eq.)						
	1994	2000	2005	2011	2014	2016	2019
Energy	92,977.76	146,926.37	202,676.41	230,603.00	255,079.75	253,156.64	259,326.11
IPPU	5,678.85	11,531.89	15,101.60	17,042.27	20,235.40	23,746.04	32,853.80
Agriculture	8,184.72	8,752.57	10,265.04	9,906.28	11,095.67	10,711.36	9,921.71
LULUCF	-188,627.10	-169,397.24	-197,076.76	-241,252.18	-249,952.54	-215,375.05	-214,714.54
Waste	12,612.60	16,717.25	22,000.75	27,081.76	28,377.66	26,565.41	28,256.59
Total (Excluding LULUCF)	119,453.92	183,928.08	250,043.80	284,633.31	314,788.47	314,179.45	330,358.21
Total (Including LULUCF)	-69,173.17	14,530.85	52,967.03	43,381.13	64,853.93	98,804.40	115,643.68

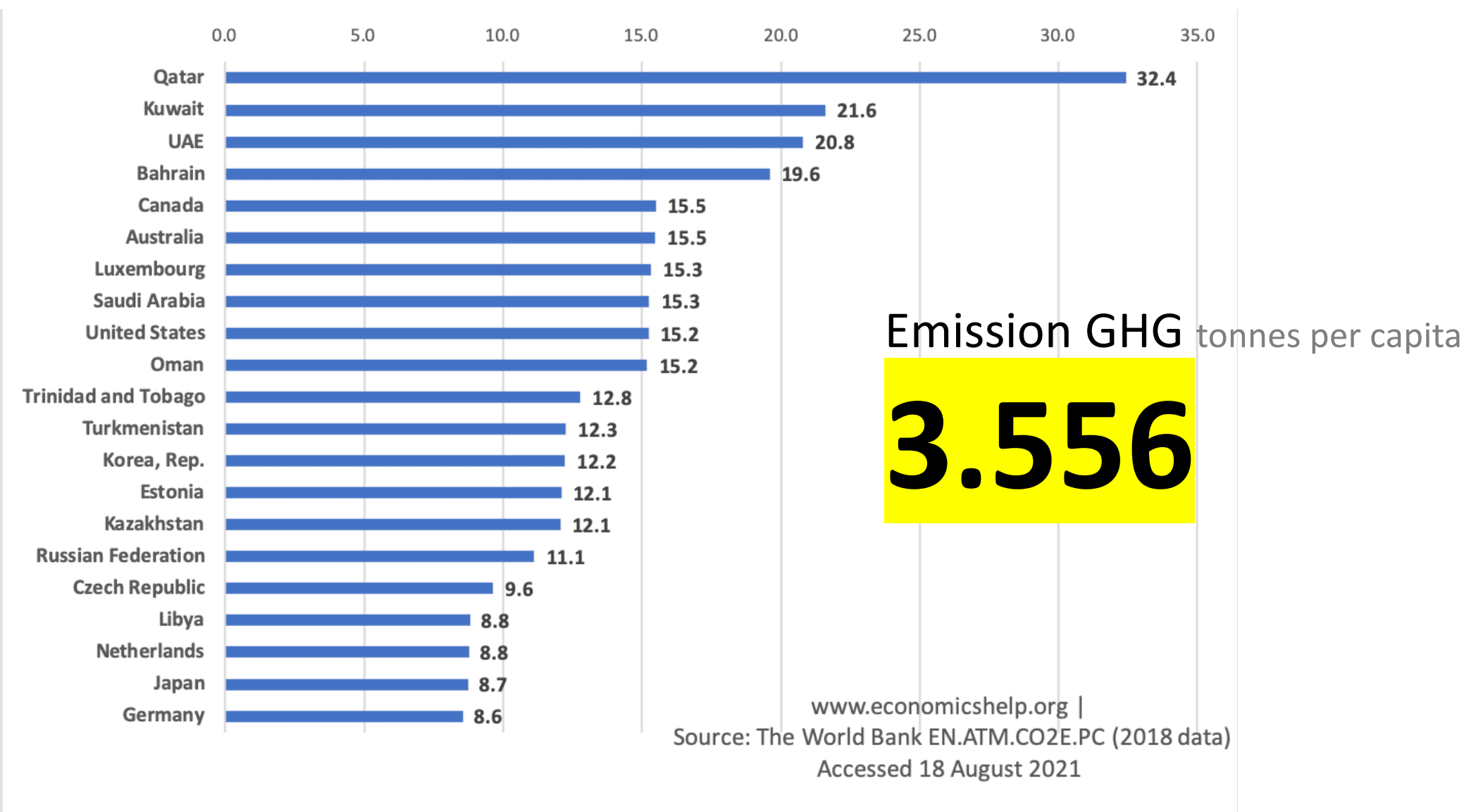
Source: Biennial Update Report No. 4 (BUR4 Malaysia)

MALAYSIA: GHG Emissions for 1994, 2000, 2005, 2011, 2014, 2016, 2019



Source: Biennial Update Report No. 4 (BUR4 Malaysia)

Highest emitters per capita 2018



Mitigation Actions

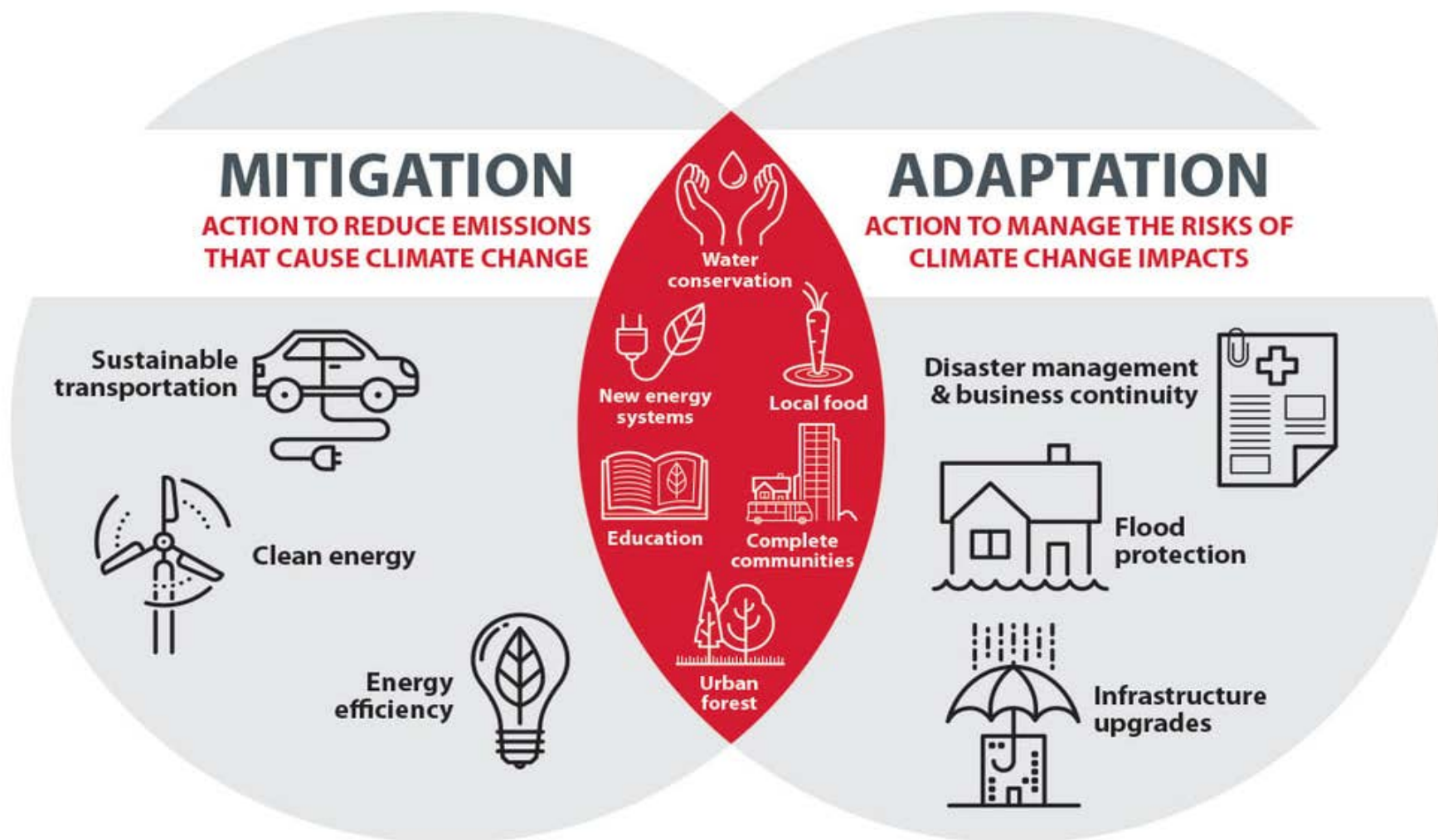
- Renewable Energy & Energy Efficiency
- Transportation
- Recycling activities
- Biogas recovery from palm oil
- Forestry

Key Adaptation Actions

- Addressing flood
- Coastal protection
- Water and food security
- Public health

Source: Malaysia's BUR-3, 2020

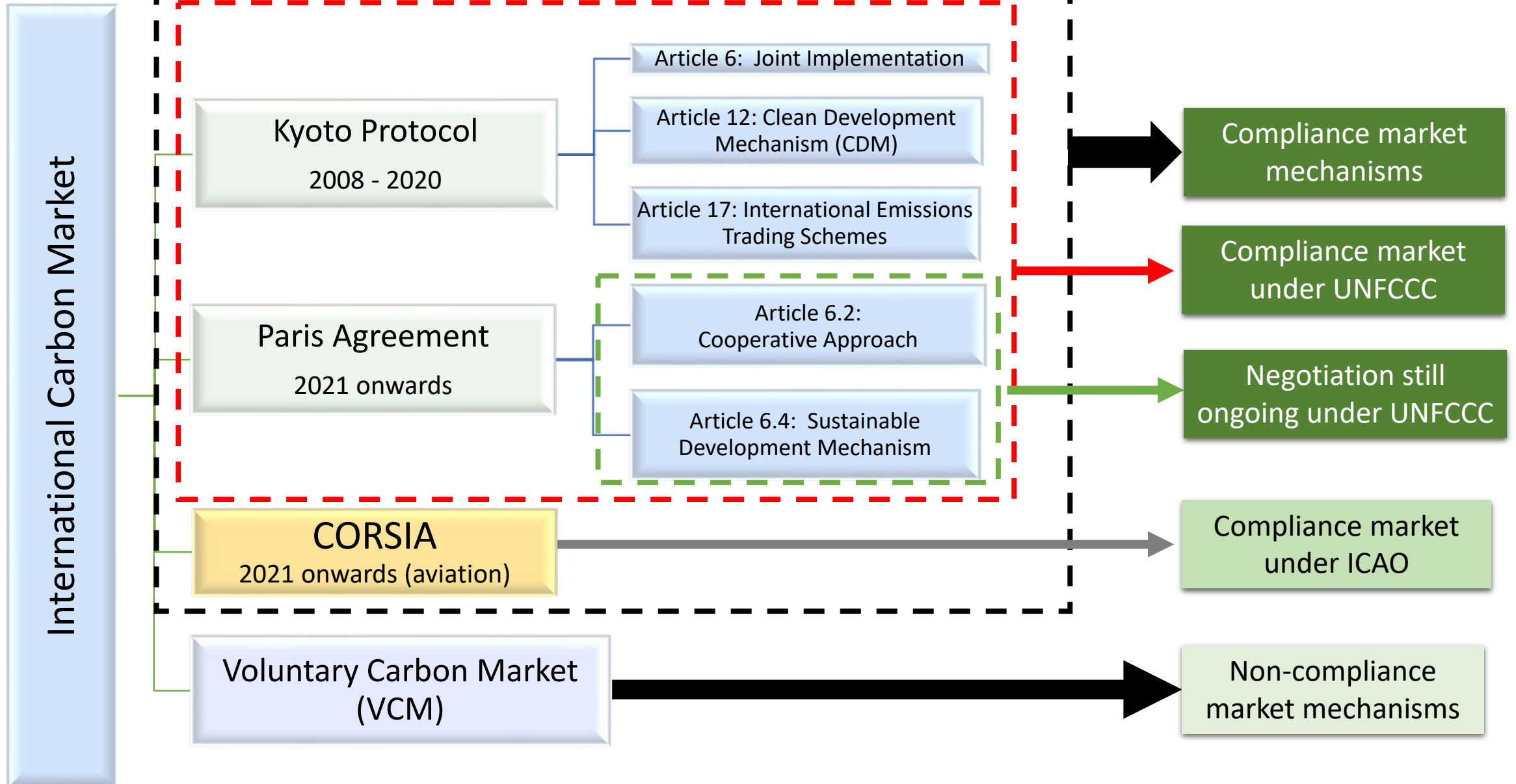
Building Climate Resilience



PRIORITIES

- Water conservation
- New energy system
- Local food
- Education
- Complete communities
- Urban forest

International Carbon Market Mechanism



Seven Commandments

1.



PHASE DOWN

Change for green energy, or opt for energy efficiency

2.



Reduce water consumption

3.



Cycling and walking for short destinations

4.



Reduce, reuse, reclaim used materials, products, services

5.



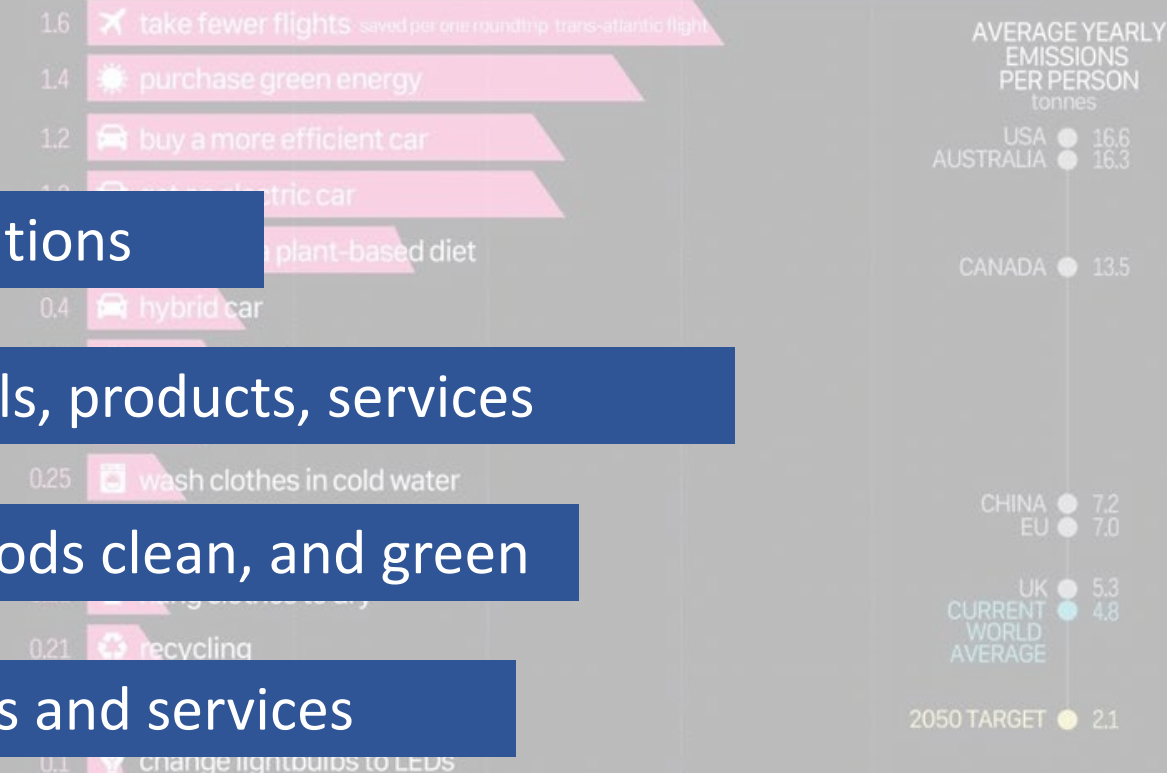
Buy and sell climate-neutral products and services

GHG offsetting after all major events, travels, activities

Source: WRI.

What can we personally do to reduce emissions?

Genuinely impactful actions, according to data



for combining all greenhouse gas emissions in one measure
20

climate mitigation gap' (Wynes & Nicholas), Environmental Research Letters 2017



GLASGOW, SCOTLAND

26TH CONFERENCE OF THE PARTIES, UNFCCC, 31 OCT-13 NOV 2021

CYCLING

PUTRAJAYA vs TSUKUBA (JAPAN) vs BOSTON (USA)

	PUTRAJAYA	TSUKUBA	BOSTON
PHYSICAL INFRASTRUCTURES	6/10	9/10	7/10
WEATHER-RELATED FACTORS	7/10	7/10	7/10
SAFETY	6/10	10/10	7/10
INCENTIVES	0/10	6/10	3/10
COMMUNITY SUPPORT	1/10	8/10	5/10

Budaya Berbasikal



MARI KITA BERBASIKAL

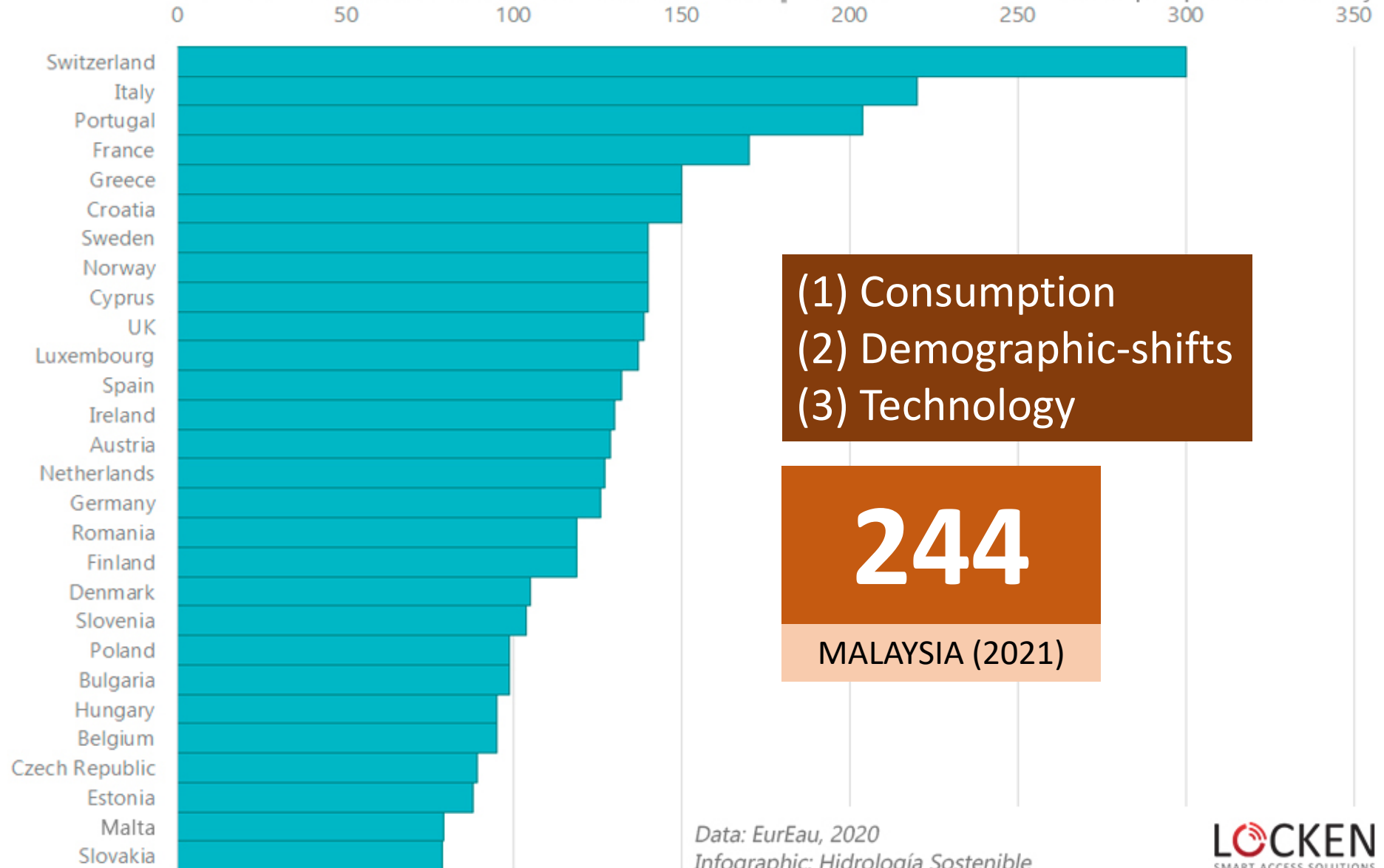
Puisi oleh Zaini Ujang

Mari kita berbasikal mengelilingi kota raya permai untuk beriadah, mengalir keringat, memperkuat otot dan menyegar minda. Berbasikal menyihat dan menceriakan seluruh warga kota dan desa.

Mari kita berbasikal ke kedai dan warung kopi, pasaraya dan pasar tani, masjid dan surau, sekolah dan kampus untuk memudahkan perjalanan, menjimatkan, mengurangkan kesesakan lalu lintas dan bersantiaian. Berbasikal merupakan resam bangsa maju dan merdeka. ...

Household water consumption

Litres per person and day



Q & A





THANK YOU



“Committed To Engineering Excellence”

BOARD OF ENGINEERS MALAYSIA

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