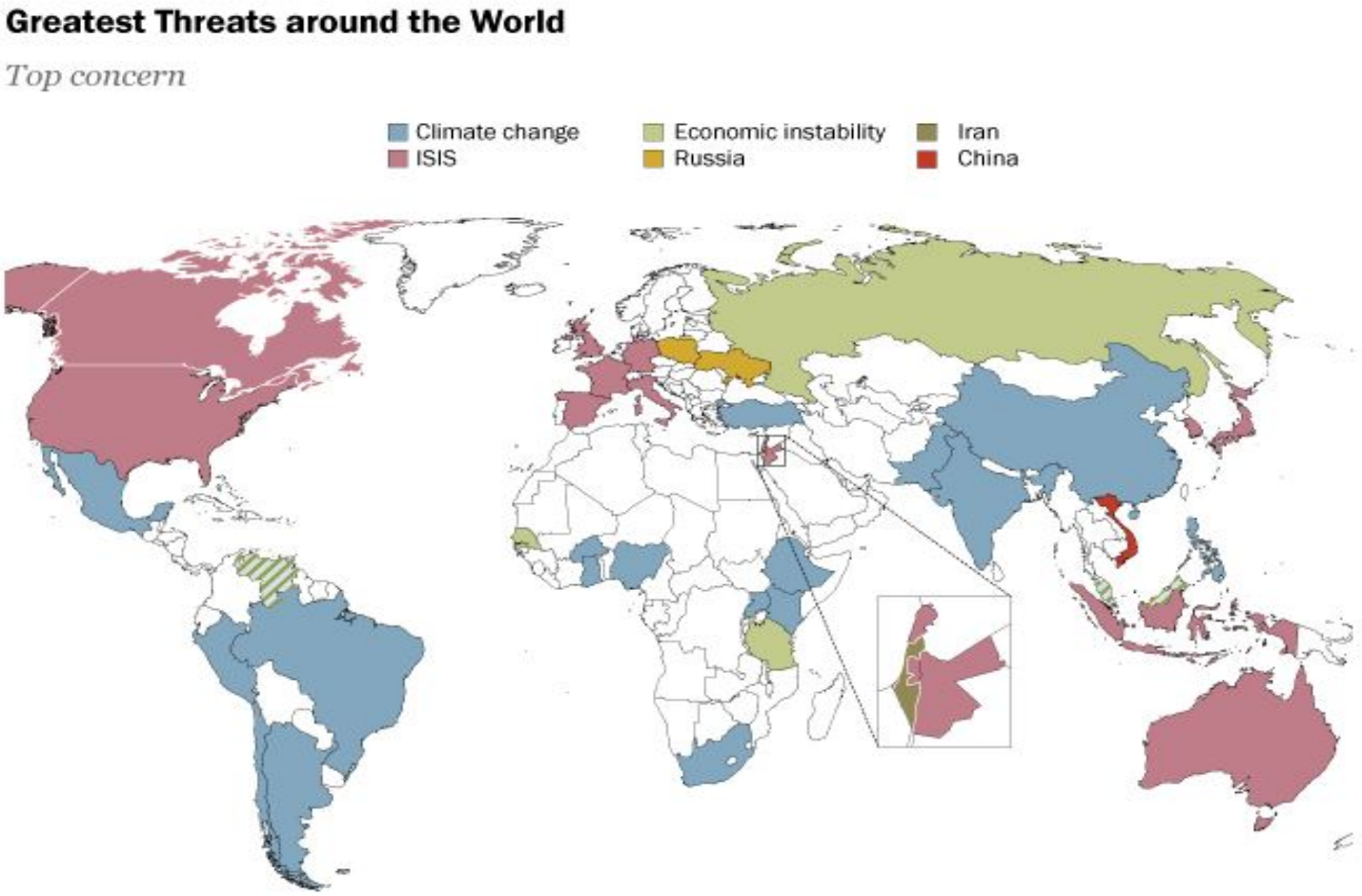
WRI INDONESIA

CRASH COURSE ON THE

SCIENCE AND POLITICS OF CLIMATE CHANGE

“CHINA AND INDIA FEAR CLIMATE CHANGE MORE THAN EACH OTHER.”



In 19 of 40 nations survey, climate change ranked as the biggest worry.
Source: Pew Research Institute, 2015

WRI INDONESIA

PART I: THE SCIENCE

WHAT IS GLOBAL WARMING?

CRASH COURSE ON CLIMATE CHANGE

WRI INDONESIA

GLOBAL WARMING: SO WHAT?

IMPACTS OF CLIMATE CHANGE IN INDONESIA BY 2050 AND 2100

>2°C temperature increase

2-meter

sea-level rise by 2100, 6 meter in 1000 years

42 million

Indonesians could be at risk of regular flooding (4th rank globally)

4.9 million of Jakartans will be affected

6.6 million

hectares of Indonesia's land will be flooded

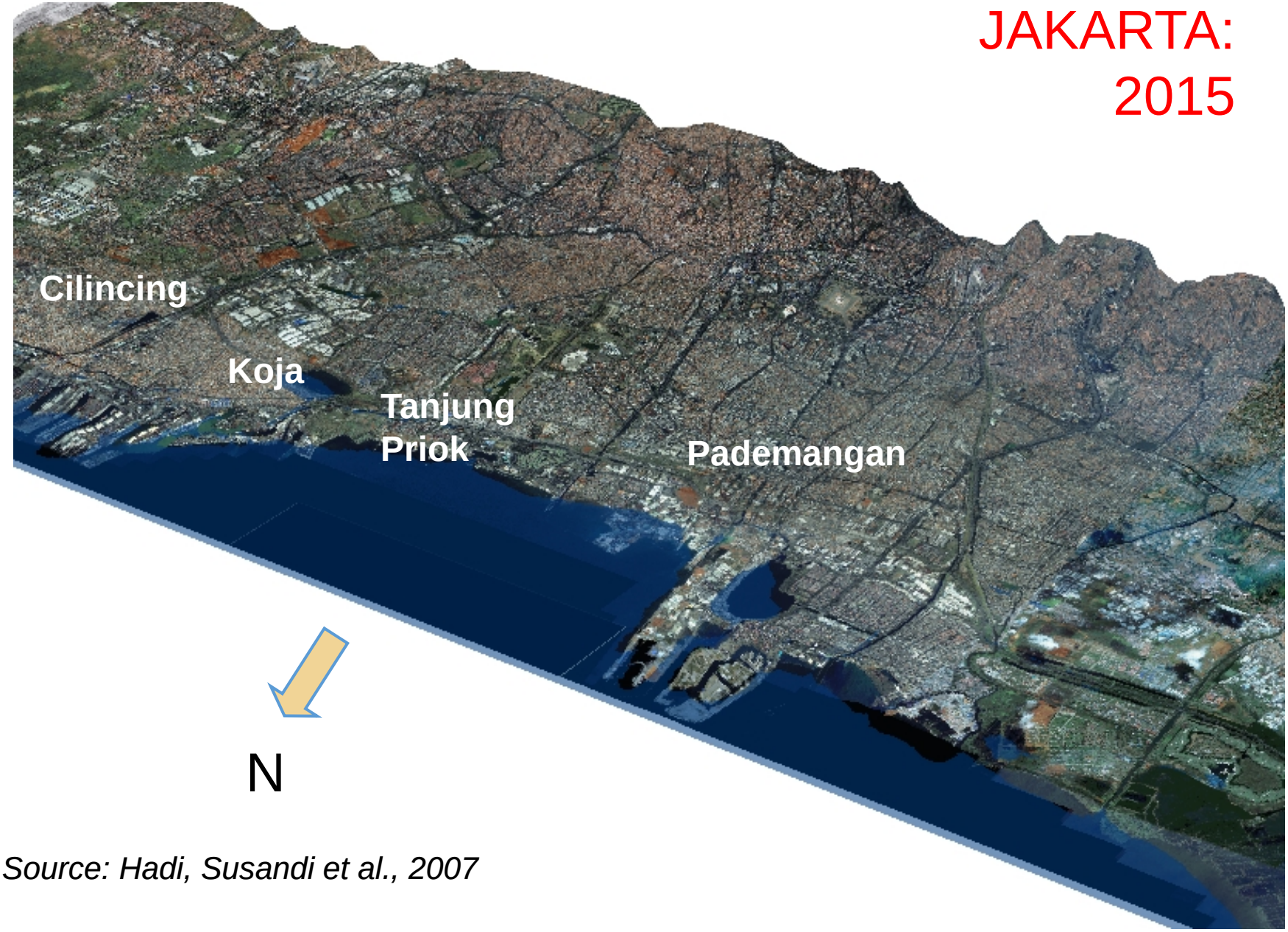
1.5+ thousands

number of islands potentially drowned in 2050

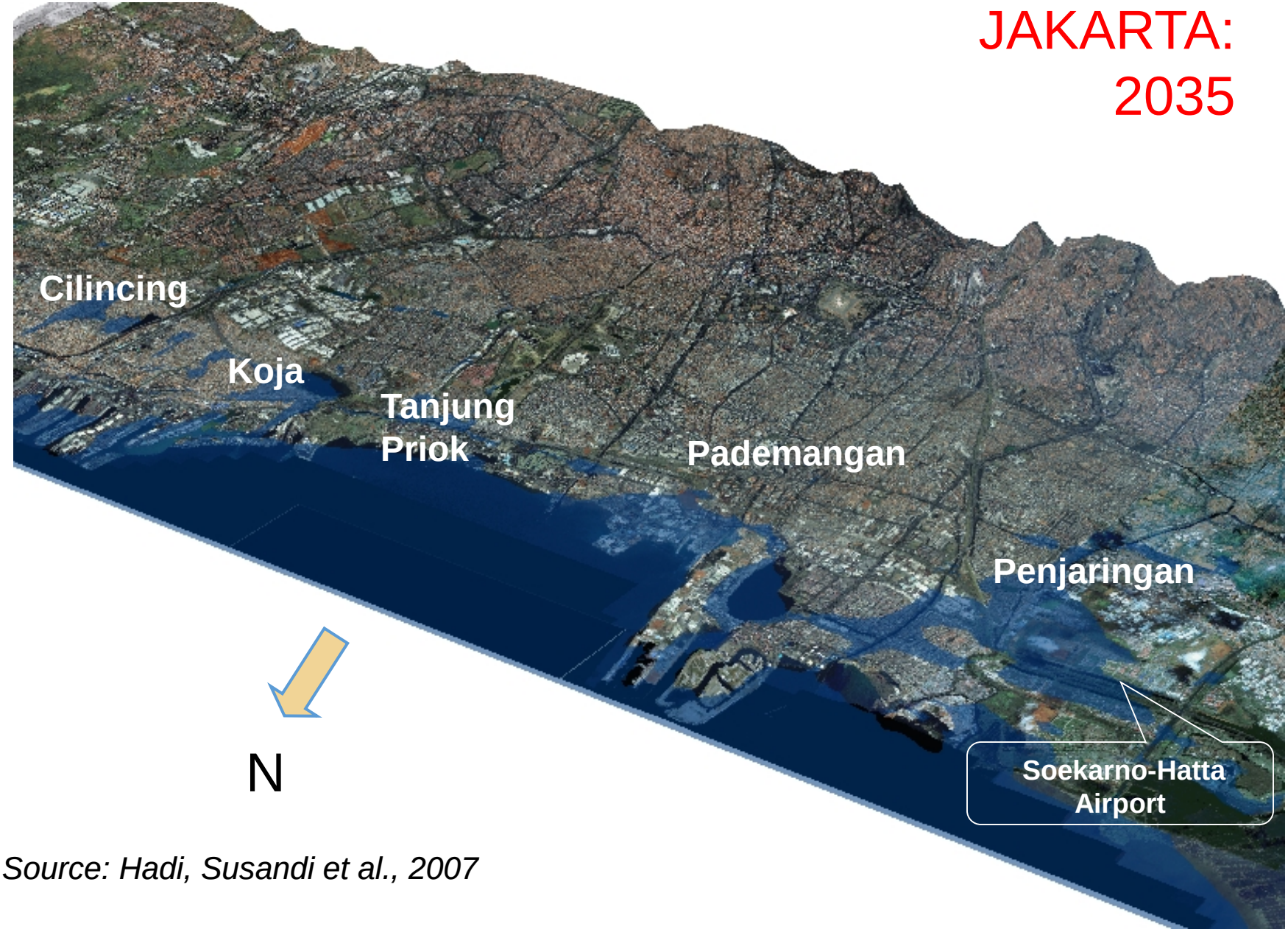
2 times

drought frequency that will threaten agriculture

JAKARTA: 2015



Source: Hadi, Susandi et al., 2007

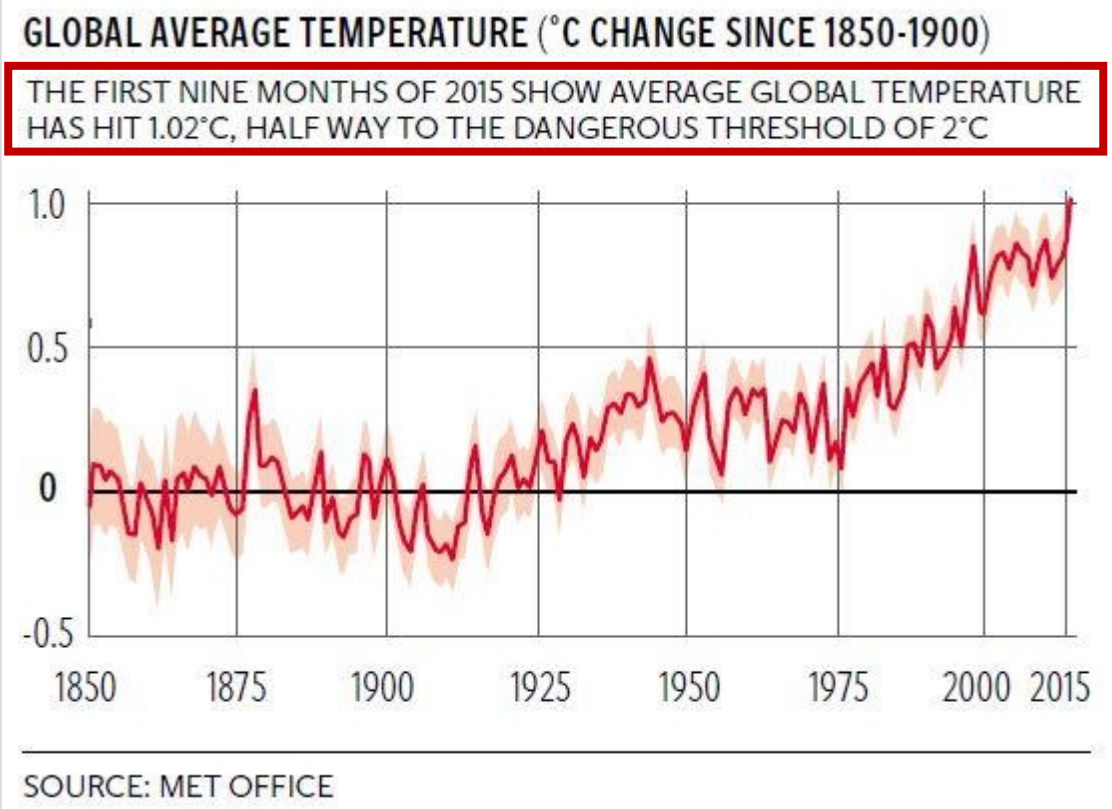


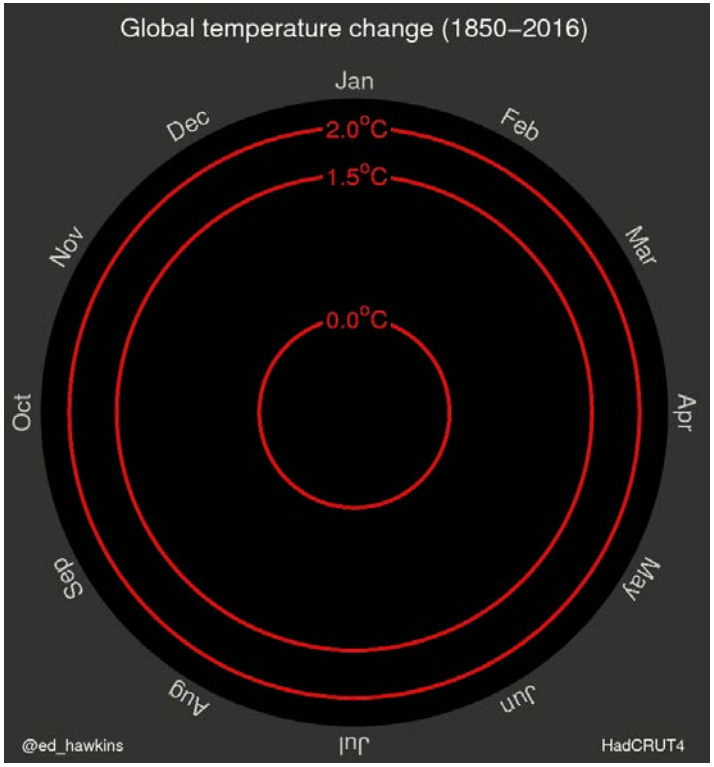
Source: Hadi, Susandi et al., 2007

WHERE ARE WE NOW?

2016 WAS HOTTEST YEAR ON RECORD.

FINAL DATA CONFIRMS RECORD-BREAKING TEMPERATURES FOR THIRD YEAR IN A ROW.



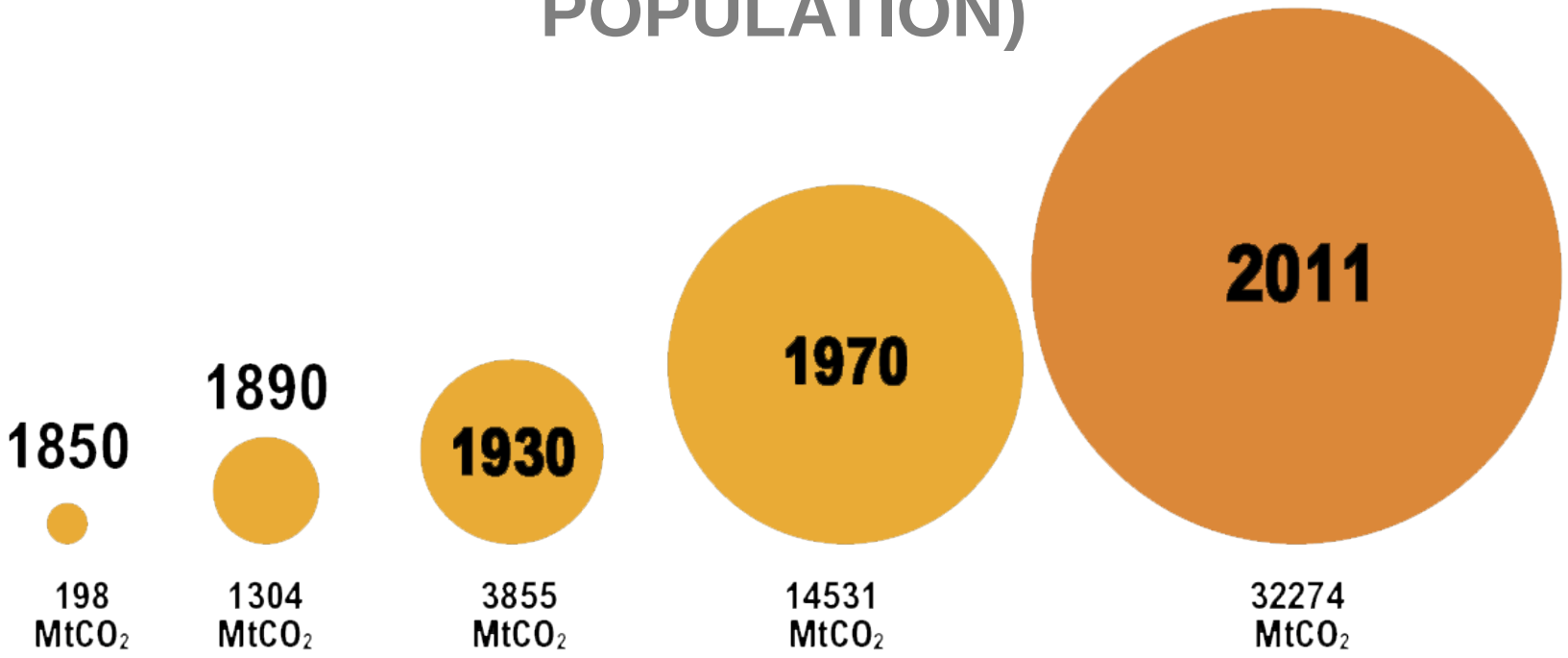


Source: https://www.theguardian.com/environment/2017/jan/18/2016-hottest-year-ever-recorded-and-scientists-say-human-activity-to-blame

PART I: THE POLITICS

WHAT/WHO SHOULD BE RESPONSIBLE?

RISING GLOBAL EMISSIONS (& POPULATION)



163-fold

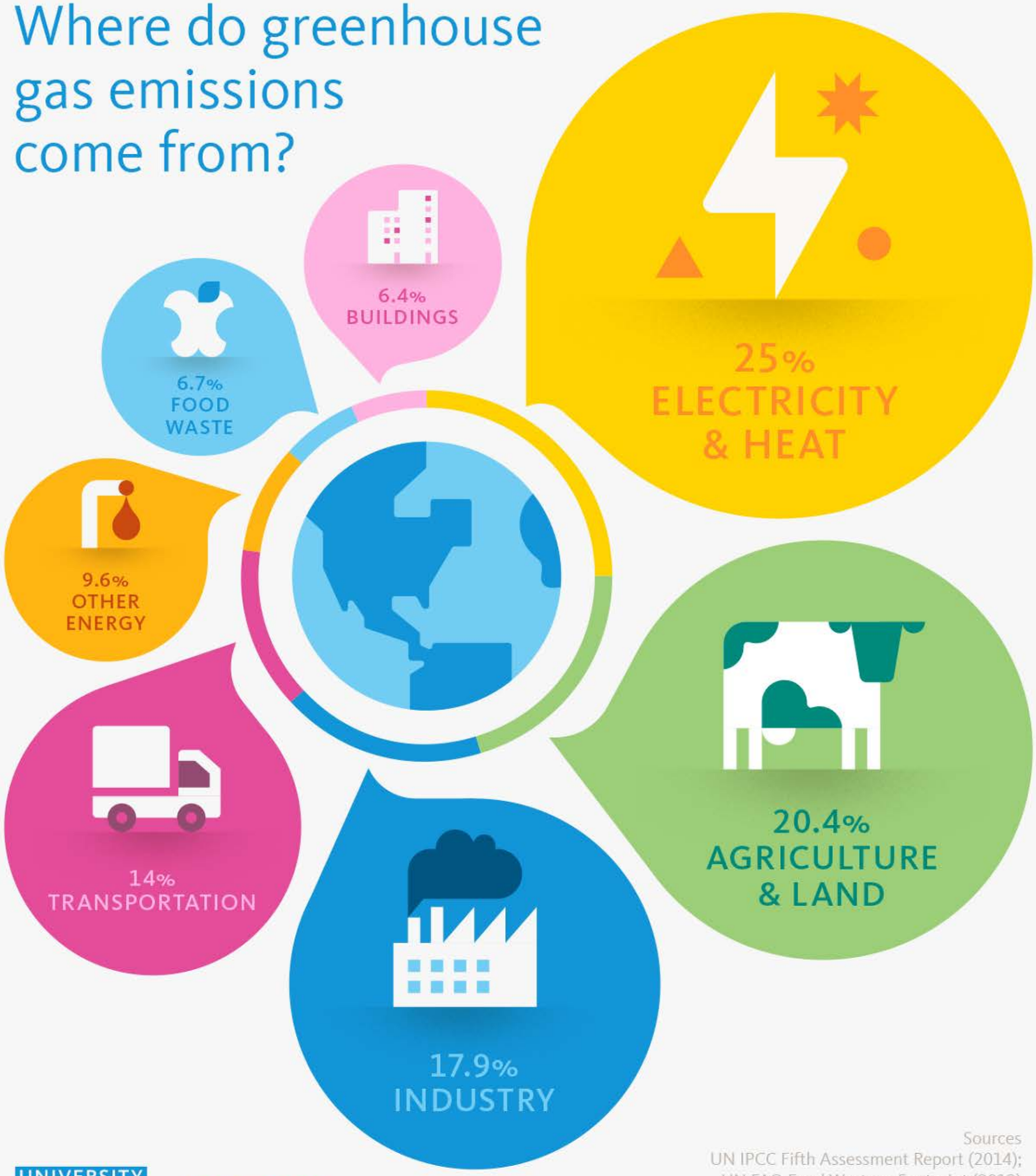
vs.

6-fold

1.2 billion people

7 billion people

Where do greenhouse gas emissions come from?



UNIVERSITY OF CALIFORNIA

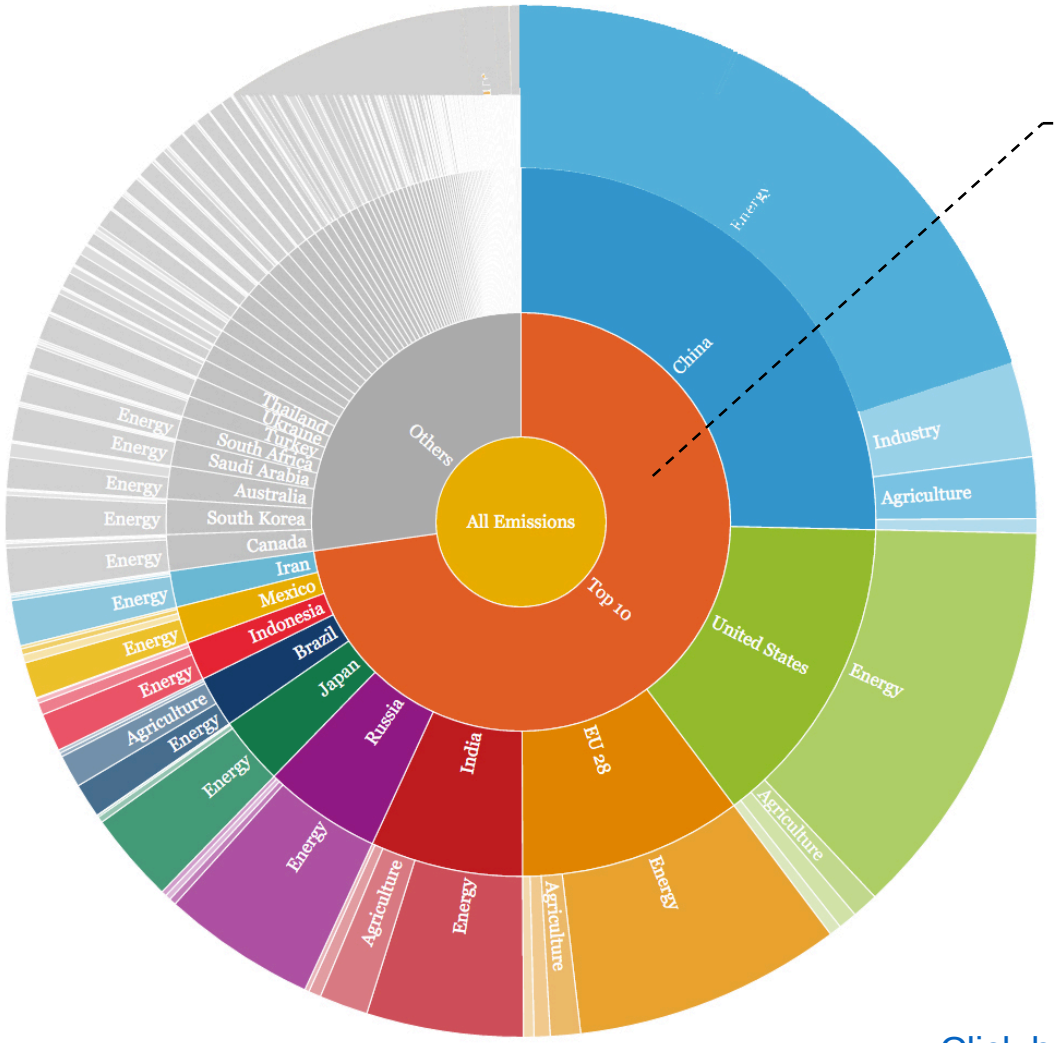
Learn more at
climate.universityofcalifornia.edu

Sources
UN IPCC Fifth Assessment Report (2014);
UN FAO Food Wastage Footprint (2013)

Percent of global greenhouse gas emissions.

Global Top 10 Greenhouse Gas Emitters (2012)

Top 10 GHG emitters accounted for more than 2/3 of the global emissions total



72% (31GtCO2e) of global GHG is emitted by just 10 countries:

1. China
2. US
3. EU
4. India
5. Russia
6. Indonesia
7. Brazil
8. Japan
9. Canada
10. Mexico

Click here to access full interactive graphic (CAIT)

PART III INTERNATIONAL CONTEXT

WHAT HAVE WE DONE SO FAR?

1992

United Nations Framework Convention on Climate Change is established.

GOAL

Stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system

196 parties.

DECEMBER 2015 PARIS AGREEMENT

Conference of Parties (COP) 21 Paris

Under the terms of the Paris Agreement on climate change, the world agreed to try to keep the temperature rise to "well below 2C ... and to pursue efforts to limit the temperature increase even further to 1.5C".

195 countries have adopted the first universal climate agreement

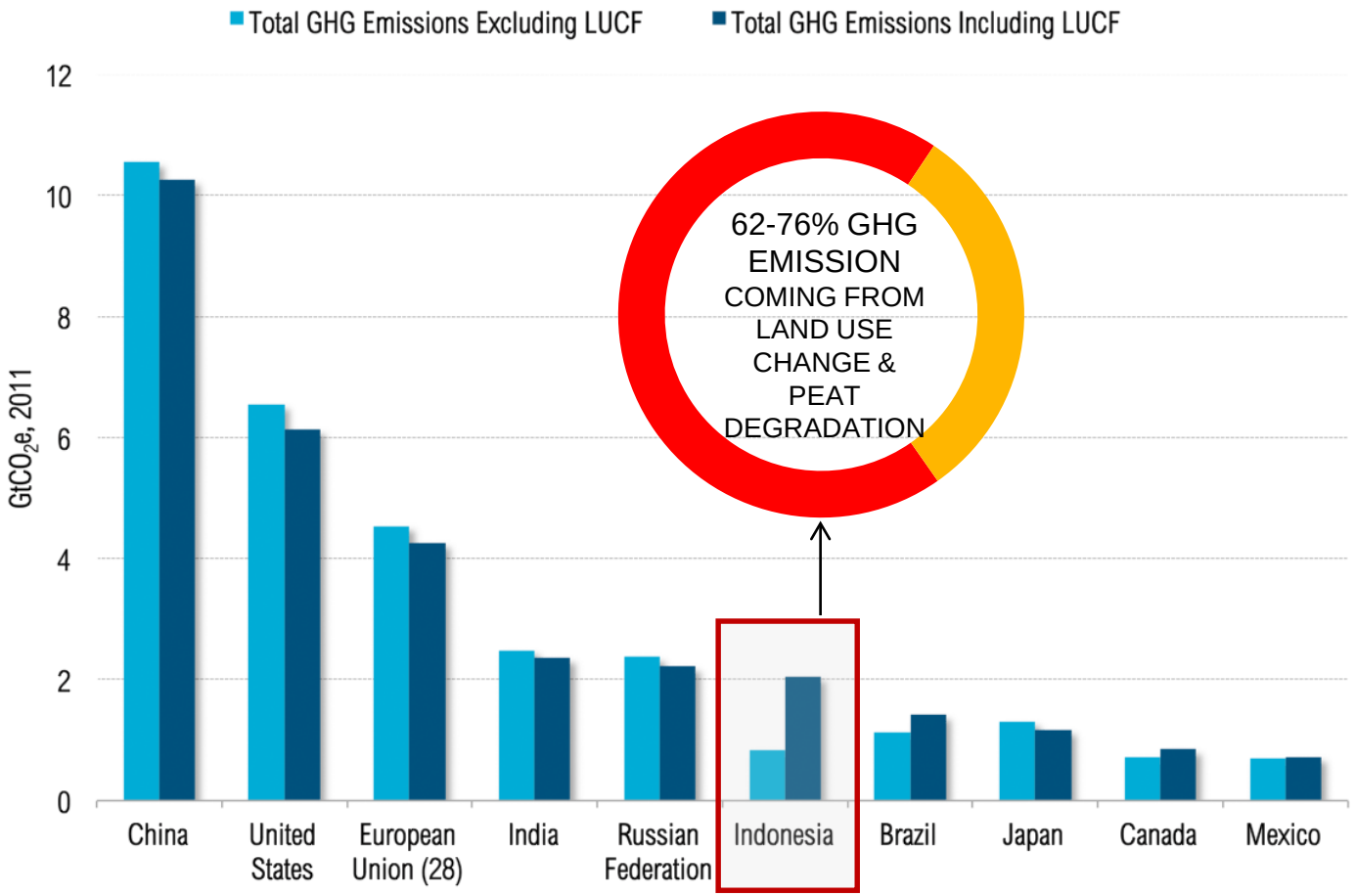
187 countries shared national climate plans:

Intended Nationally Determined Contributions

PART III NATIONAL CONTEXT

HOW ABOUT INDONESIA?

INDONESIA 6TH LARGEST GHG EMITTER



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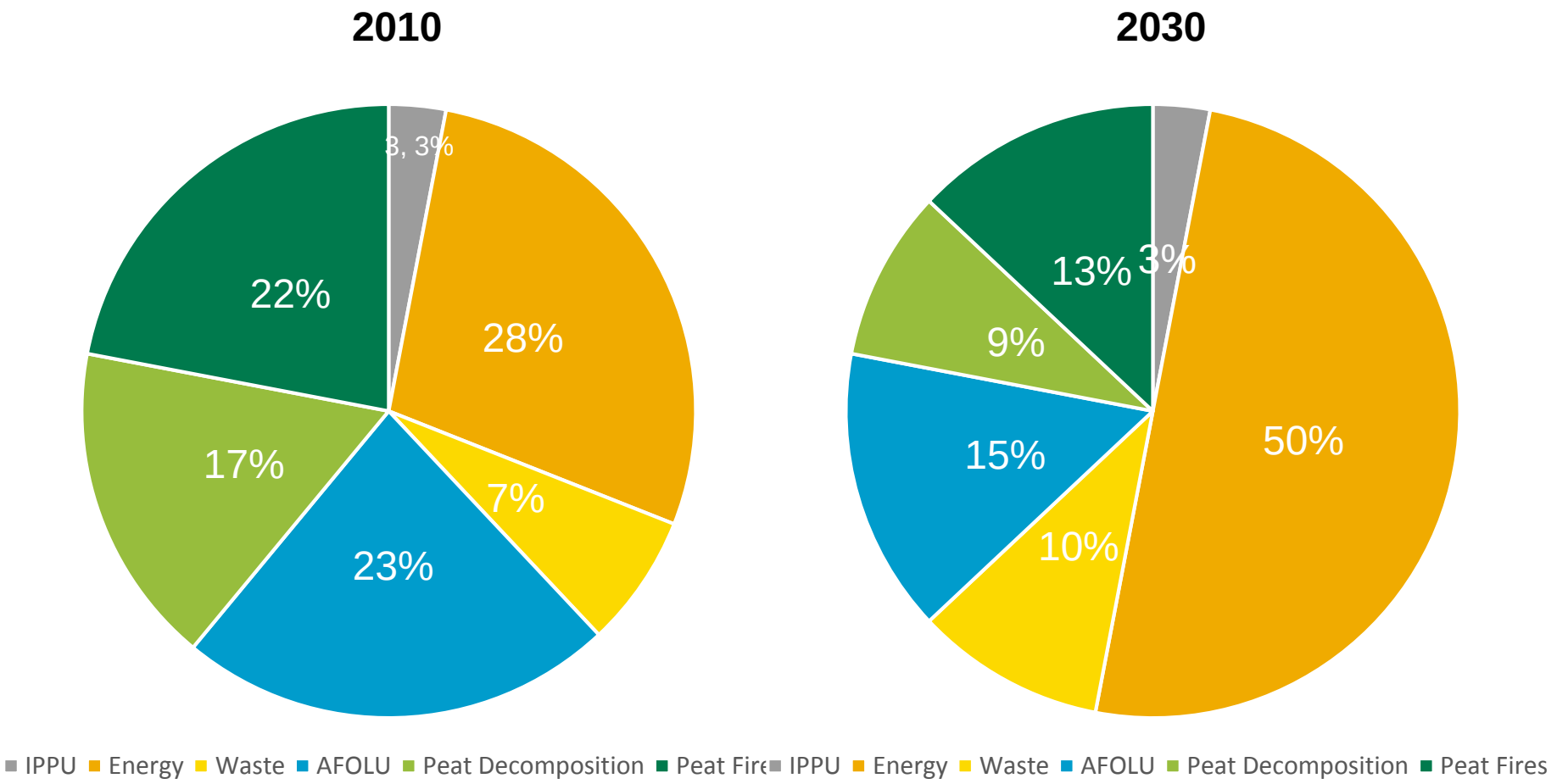
INDONESIA'S EMISSIONS PROFILE



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INDONESIA'S CLIMATE COMMITMENT

"As a country that hosts one of the largest forests in the world, Indonesia has chosen to **become part of the solution."**

Indonesia's emission reduction targets:

- 26% emission reduction against 2020 BAU (RAN GRK)
- 29-41% emission reduction against 2030 BAU (NDC)

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NATIONAL CONTEXT AND TARGETS

WRI INDONESIA

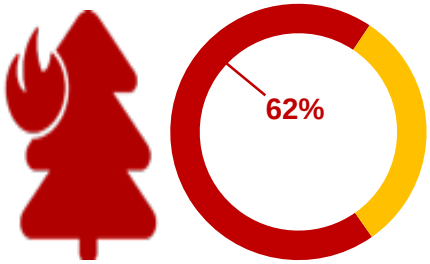
NATURAL-RESOURCES DRIVEN ECONOMY

Indonesia houses the world's 3rd largest rainforest and ranks as 10th biggest economy and is still highly dependent on extractive industries (mining, oil, gas) and land-based industry (oil palm, rubber, sugarcane).

SUSTAINABLE DEVELOPMENT TARGETS

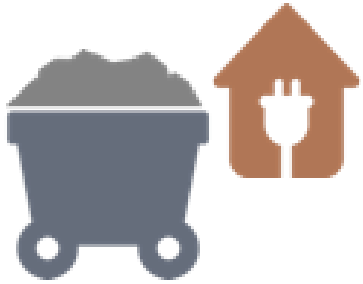
Ever-increasing demand for key commodities such as oil palm and sugarcane raises the risk of deforestation, given loose national regulations and weak law enforcement.

GHG EMISSIONS & CLIMATE TARGETS

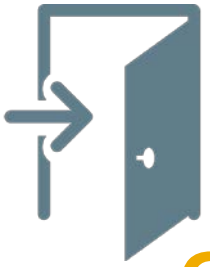


New 29% emissions reduction target by 2030 need to be achieved, while the country's emissions profile still comprises mostly from land-based activities.

ELECTRIFICATION & ENERGY TARGETS



Government's ambitious plan to close the electrification gap of 35 GW will still likely come from coal-based power plants, despite current 23% renewable energy mix target by 2025.



CHALLENGES IN INDONESIAN CLIMATE DATA

NOT RELIABLE

NOT UP-TO-DATE

DISPERSED

TOO TECHNICAL

NOT INTERACTIVE

TOP EMITTING PROVINCES | SECTORAL EMISSIONS | ADAPTATION EFFORTS | MITIGATION ACTIVITIES | DEVELOPMENT PRIORITY | PROGRESS TOWARDS REDUCTIONS

CAIT Climate Data Explorer

Indonesia Climate Data Explorer - PINDAI

Support CAIT | WORLD RESOURCES INSTITUTE | Menu

Dashboard | Country Map | Profiles | Compare | Rank Provinces | Language: EN ID

Progress toward Achieving 2020 Provincial Emission Reduction Target

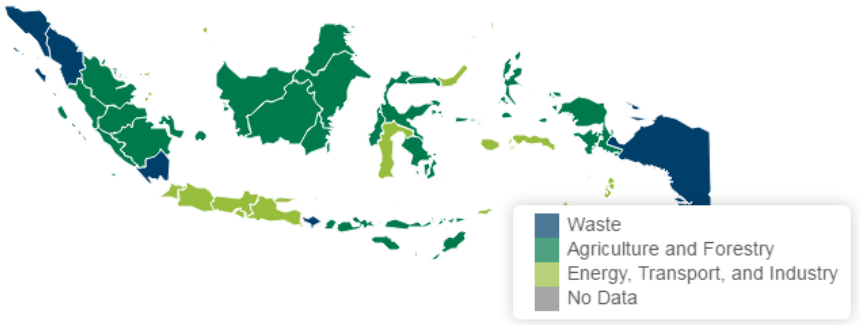
Total National Emissions 2010 (MtCO2e): 1460

Projected National Emissions 2020 (MtCO2e): 1805

Select Year: 2010 | 2011 | 2012 | 2013 | 2014

1.40%

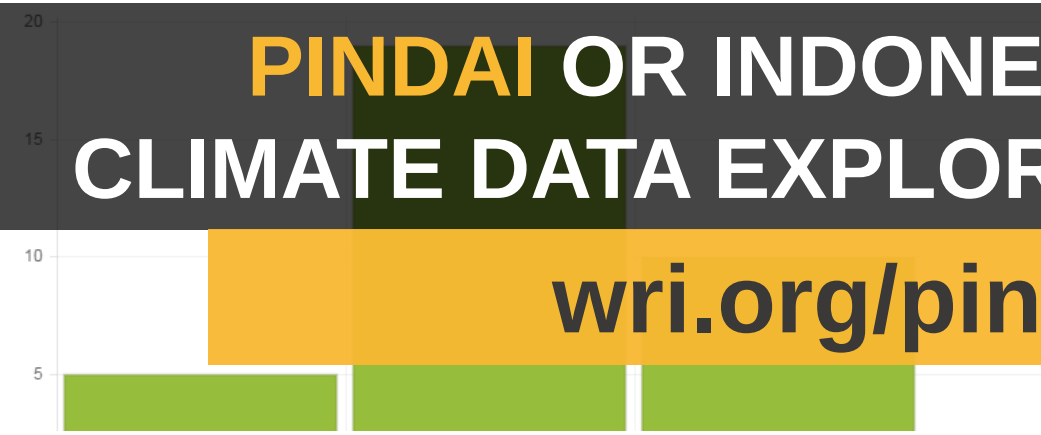
Primary Source Of Emissions In Base Year



Top 10 Emitting Provinces (2010, MtCO2e)

1.	North Sumatera	260.01
2.	Riau	213.21
3.	East Java	98.16
4.	Central Kalimantan	90.99
5.	Lampung	90.41
6.	Papua	67.24
7.	West Kalimantan	62.80

Primary Source Of Emissions In Base Year



PINDAI OR INDONESIA CLIMATE DATA EXPLORER

wri.org/pindai

INDONESIA ENERGY POLICY SIMULATOR

indonesia.energypolicy.solutions

POLICY SOLUTIONS

POLICY SCENARIO SELECTOR

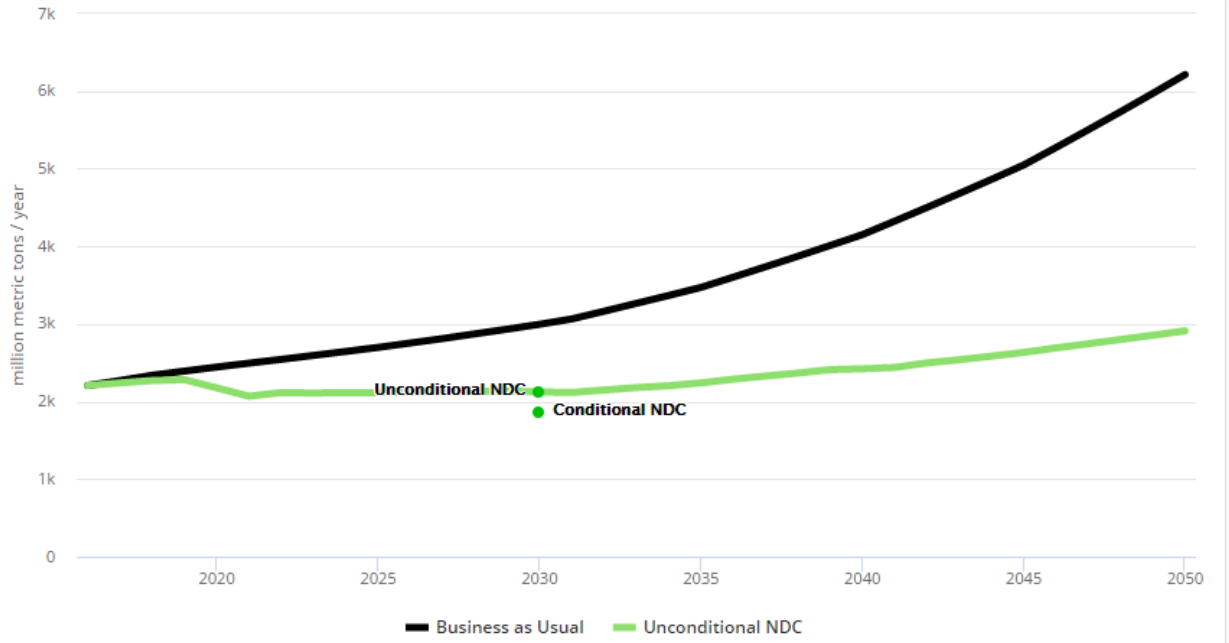
Unconditional NDC

- Transportation
- Buildings and Appliances
- Electricity Supply
- Industry
- Agriculture, Land Use, and Forestry
- Cross-Sector
- R&D

POLICY SETTINGS

- Feebate: 500 [$/(0.01 gal/mile)]
- LDVs: 300.0%
- HDVs: 150.0%
- Aircraft: 20.0%
- Ships: 20.0%
- Motorbikes: 40.0%

CO2e Emissions (Total)



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OCN OPEN CLIMATE NETWORK

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