



# Prospects for Green Jobs (GJ) in Indonesian Forestry Sector

( Trade Union Perspective )



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# About **KAHUTINDO**

## **(Indonesian Forestry and Allied Workers' Union)**

- Founded 14 Juli 1973 as Serikat Buruh Perkayuan (Wood Labour Union)
- Coverage: Forestry (HPH-HTI-HTR), Wood Processing Industries, Plantation & allied sectors
- Membership (June 2010): 96.456 workers; 178 Unit; 25 Districts; 12 Provinces
- Main-campaign: “Sustainable Forest for Sustainable Jobs”
- National Affiliation: Confederation of Indonesian Trade Unions (KSPI-CITU): 1,3M  
International Affiliation: Building and Wood Workers International (BWI): 11M
- National Representations:
  - National Tripartite Board                      - LEI                      - DKN
  - National OHS Council                      - FLEGT-EU
- Global Representations:
  - UNFCCC                      - FSC                      - AFP
  - The Forest Dialogues                      - PEFC                      - ASETUC
- Joint Campaigns:
  - BWI, USW, IUF, CFMEU, ForestWorks



# Presentation Structure

1. Industries and Green House Gases (GHGs) Emission in Indonesia
2. Potential of Green Jobs (GJ) in Forestry Sector
3. Real Issues: Problems and Challenges
4. Trade Union Recommendations

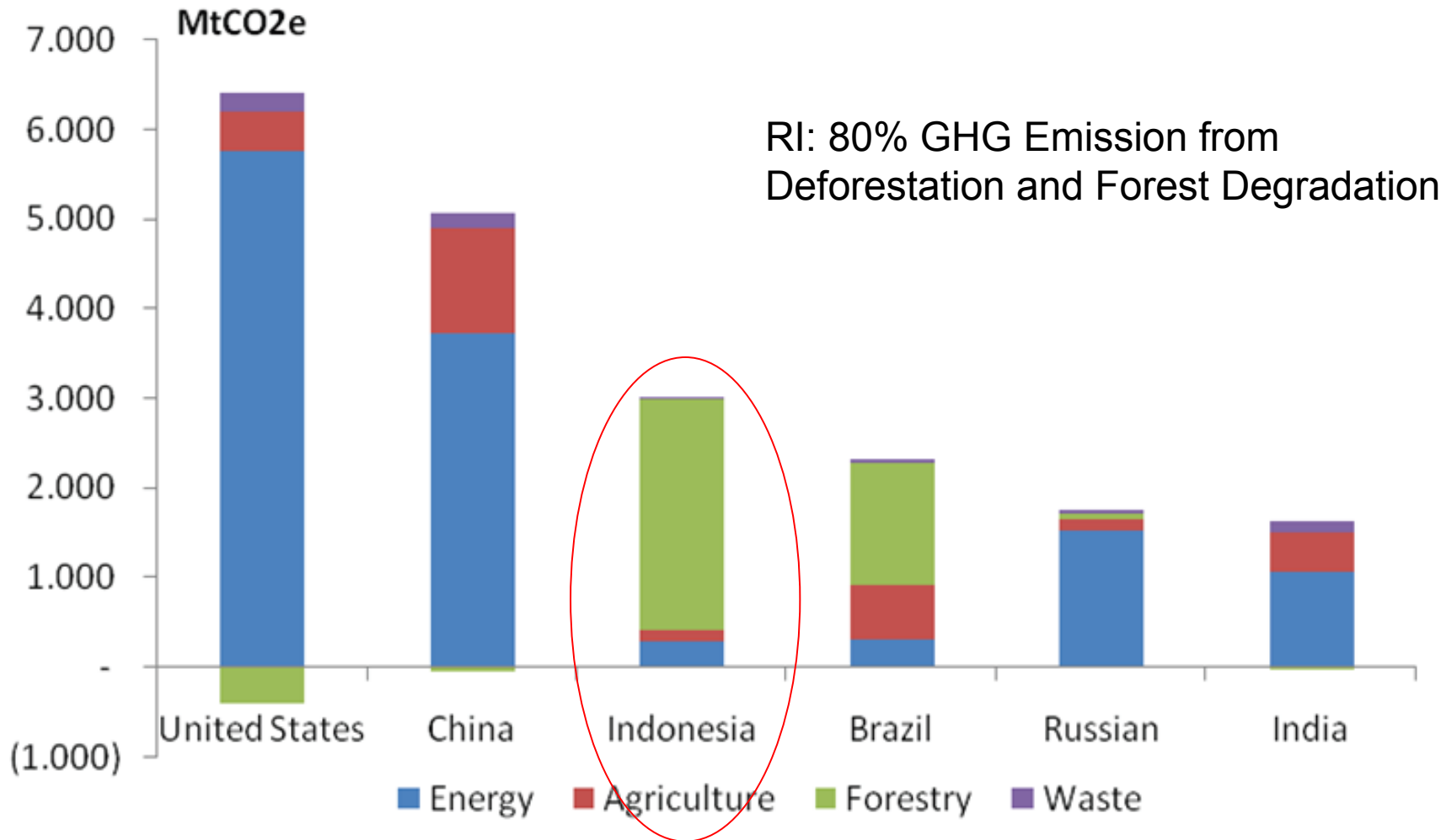


# 1. Industries and GHGs Emission





# GHG Emission Composition Comparison in 6 Countries

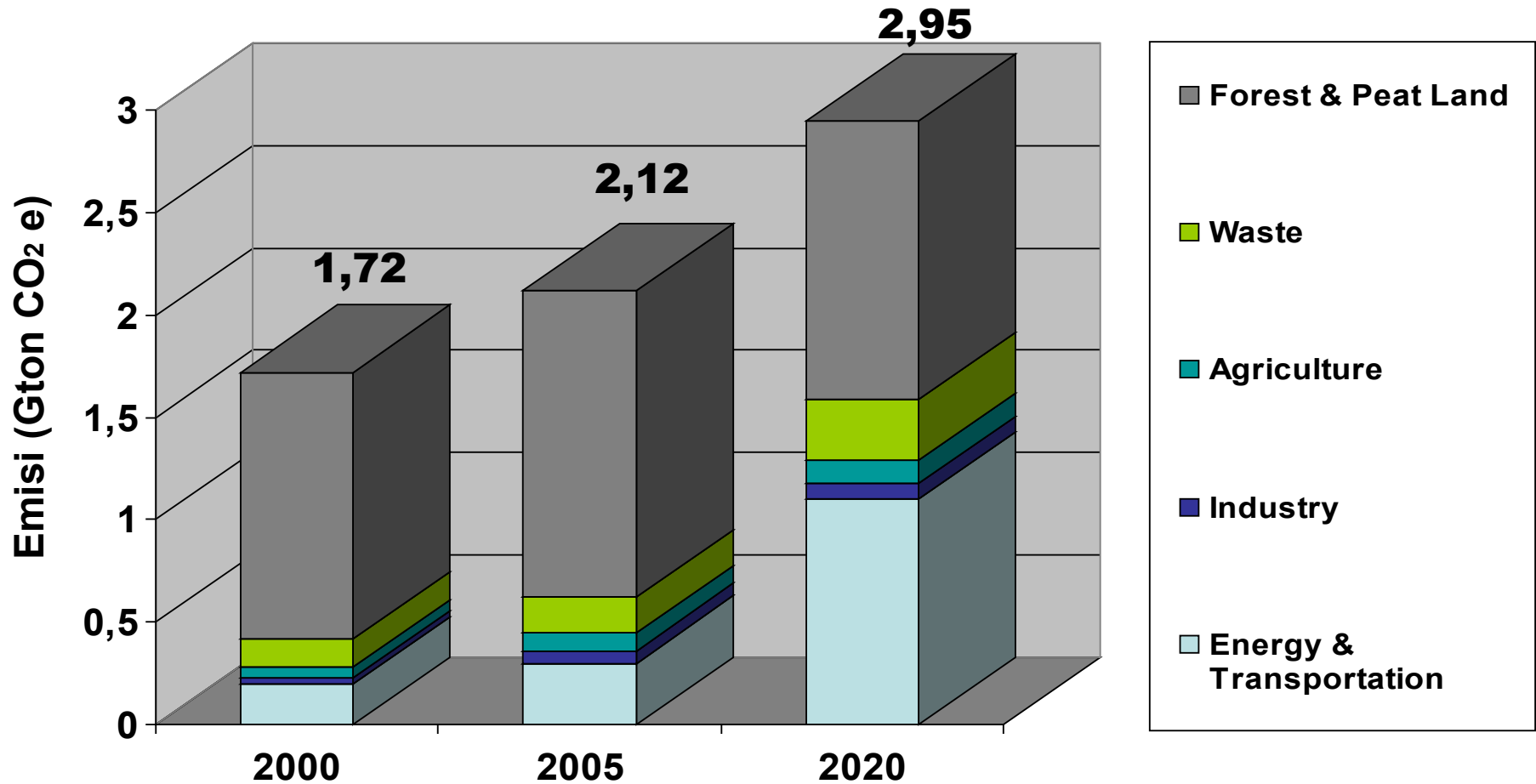


Source: PEACE-World Bank-DFID. 2007. *Indonesia and Climate Change: Current Status and Policies*.





# Profile of RI GHG Emission in 2020 (BAU Scenario)

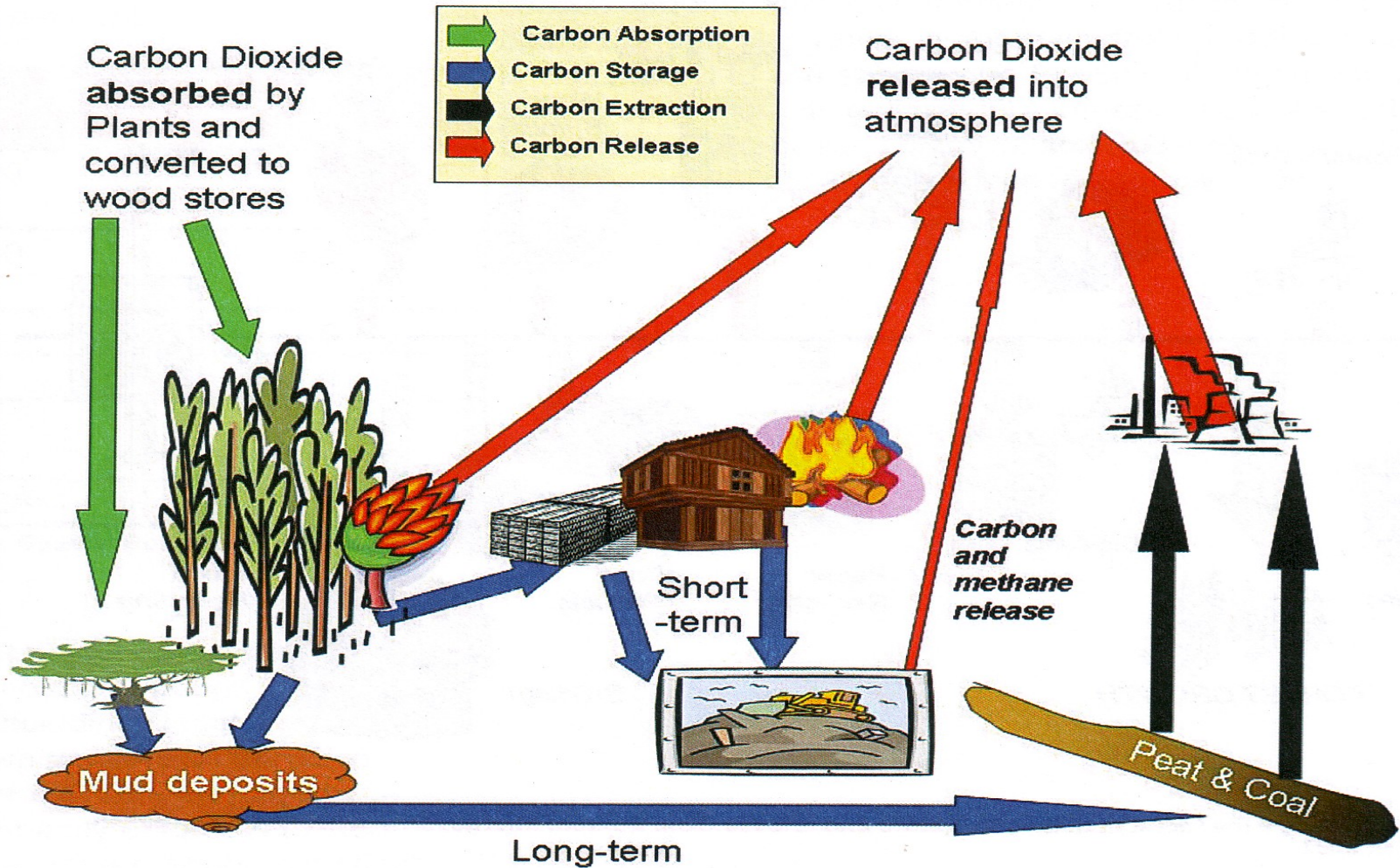


BAU: Business as Usual

Source: Bappenas, 2010



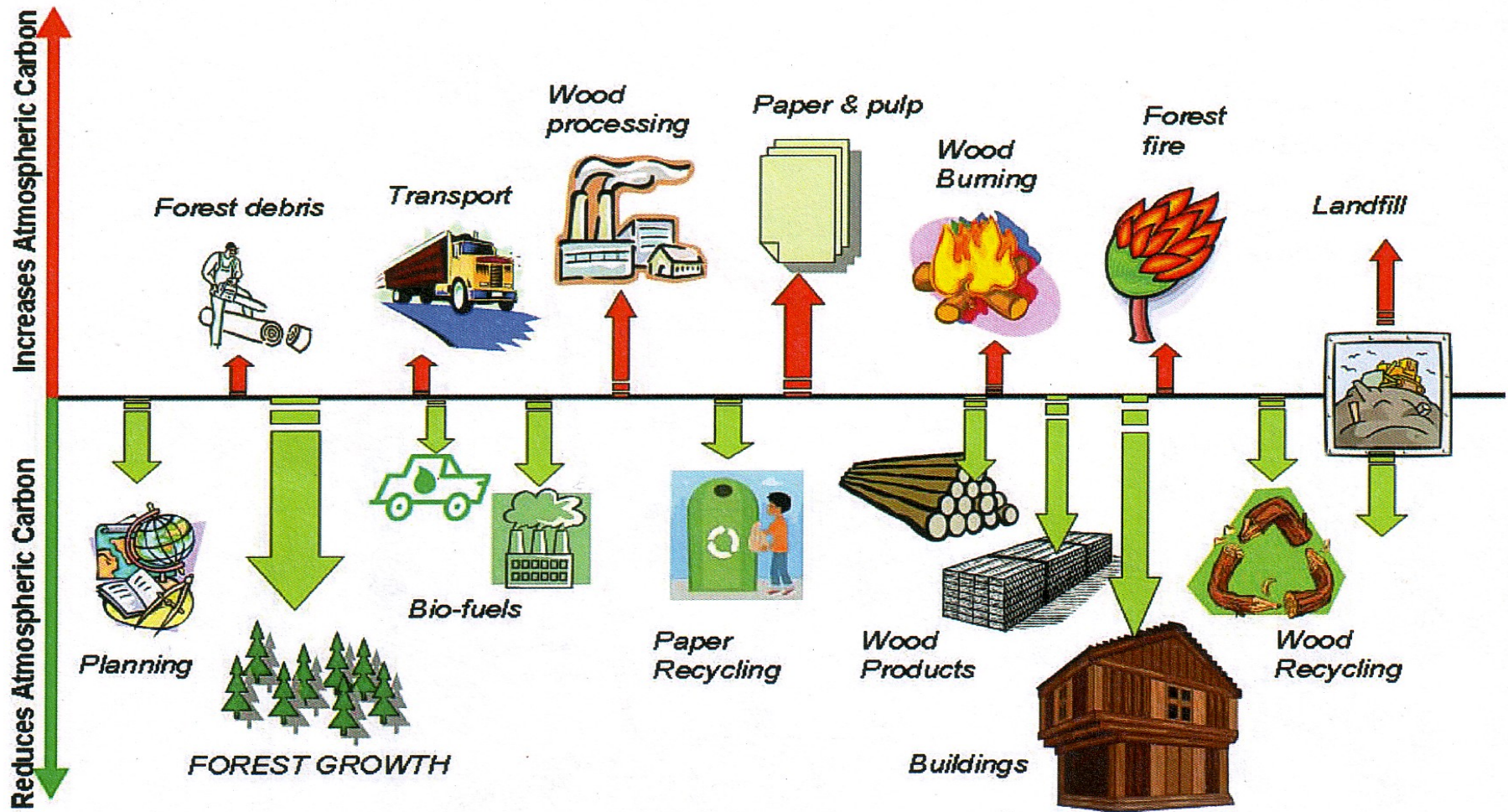
# 80% GHGs Emission from Deforestation?







# Potential Activities in Forestry Sector In RI Climate Change Mitigation

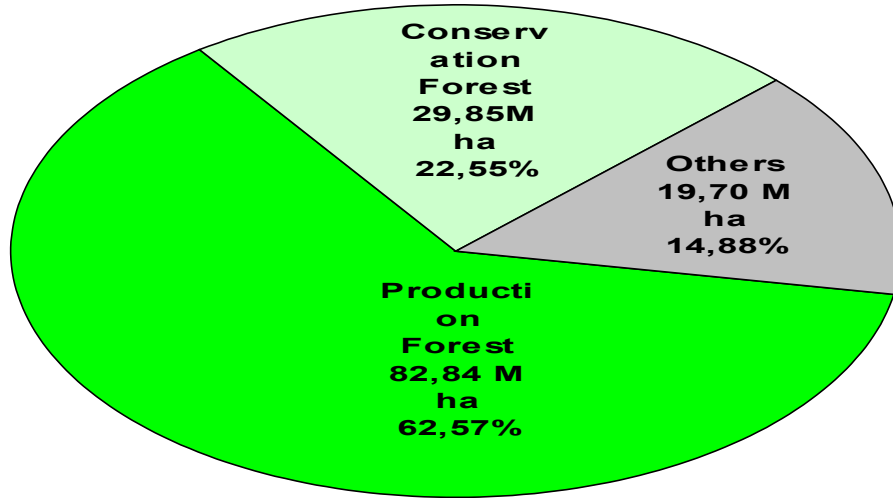






# Indonesia Forests

Indonesian Forest Coverage = 132.397.729 ha  
or 71% of Indonesian Land Coverage (187.787.000 Ha)



60% of RI GHG Emission Sourced from Forest and Peat Land (in and outside the forest areas);

17-20% of Global GHG Emission Sourced from Deforestation and Degradation of Forest;

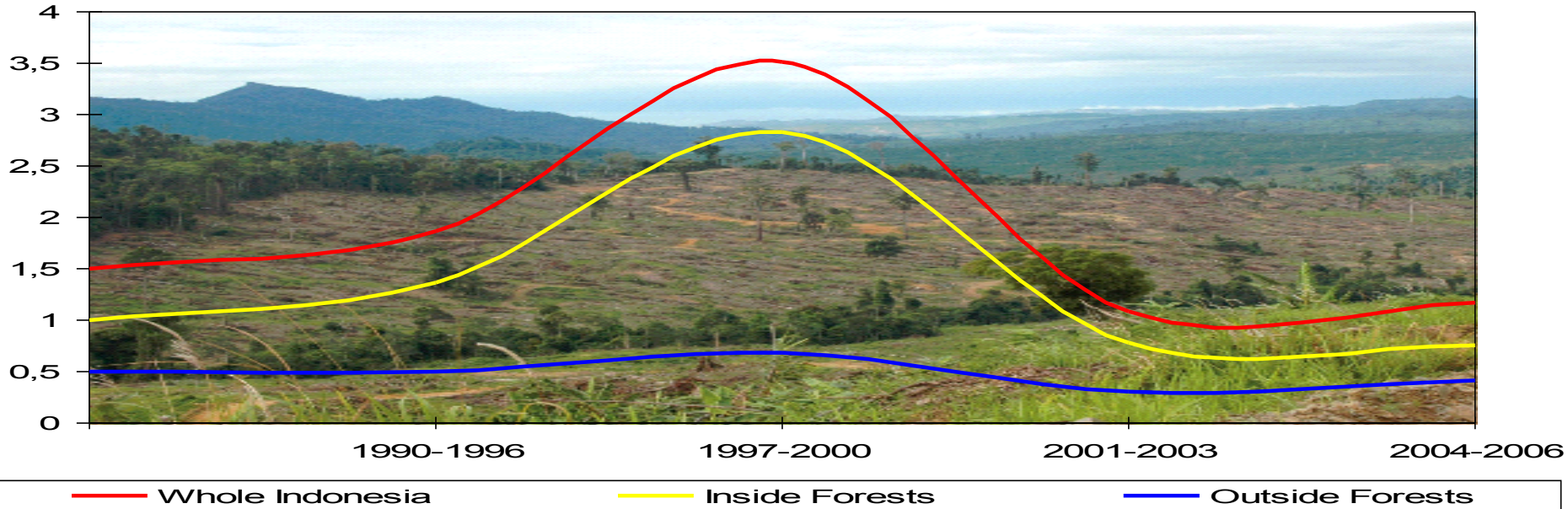
75% Deforestation and Degradation of World's Forest happen in Tropical zones, incl. RI.

FOREST COVER						
LAND COVER	FOREST AREAS		OTHER LAND-USE (APL)		TOTAL	
	Area (M ha)	%	Area (M ha)	%	Area (M ha)	%
Forested	92,327	50	8,412	4	100,729	54
Not Forested	40,071	21	46,976	25	87,047	46
Total	132,398	71	55,388	29	187,776	100

Source: MoF-Dirjen BPK



# Pace of Deforestation & Degradation of Forest

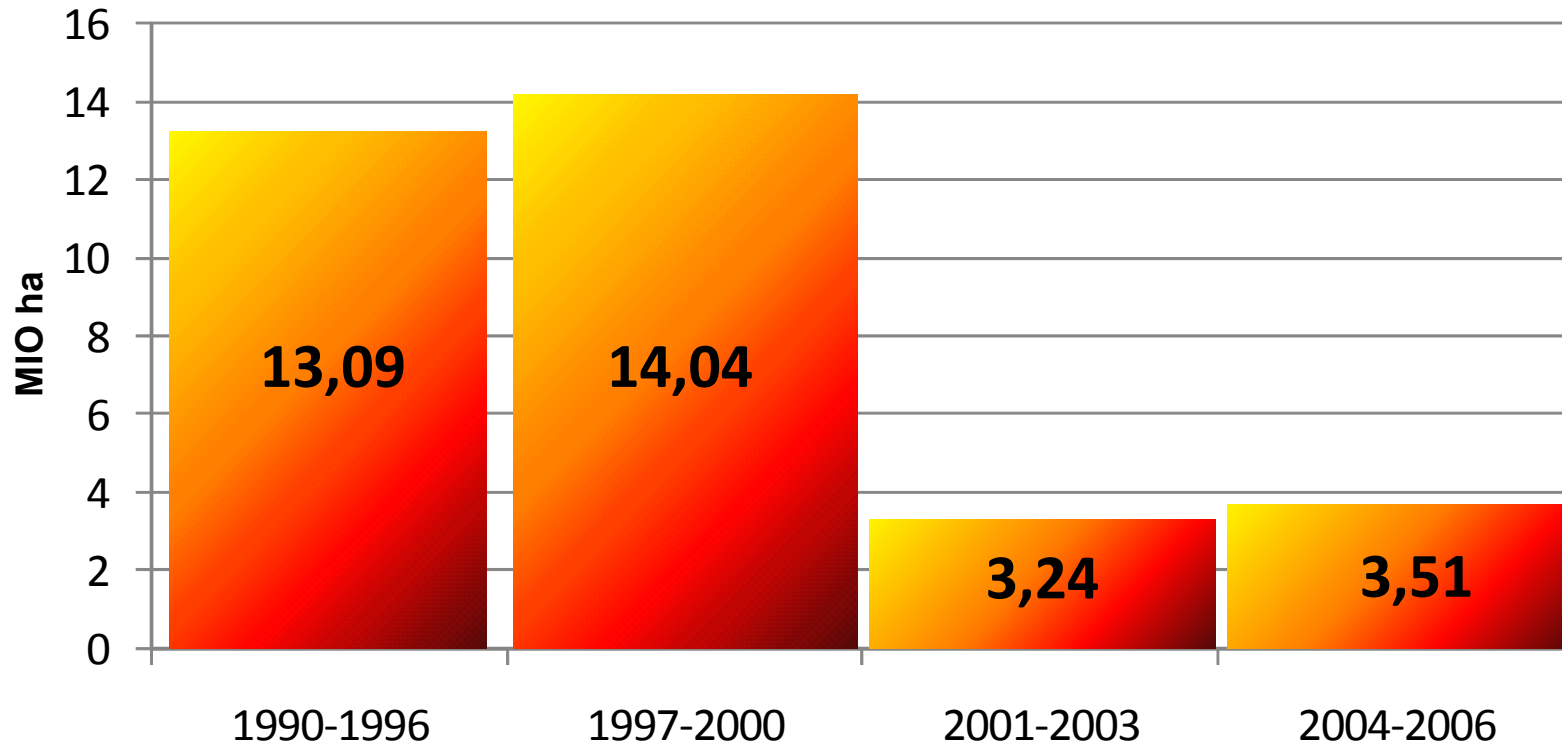


DEFORESTATION PACE	1990-1996 (M ha)	1997-2000 (M ha)	2001-2003 (M ha)	2004-2006 (M ha)	2005-2007 FAO
Whole Indonesia	1,87	3,51	1,08	1,17	0,5
In the Forest Areas	1,37	2,83	0,78	0,76	-
Outside the Forests (APL)	0,50	0,68	0,30	0,41	-

Source: MoF-Dirjen BPK



# Pace of Deforestation (Accummulated) from Deforestation Pace Data

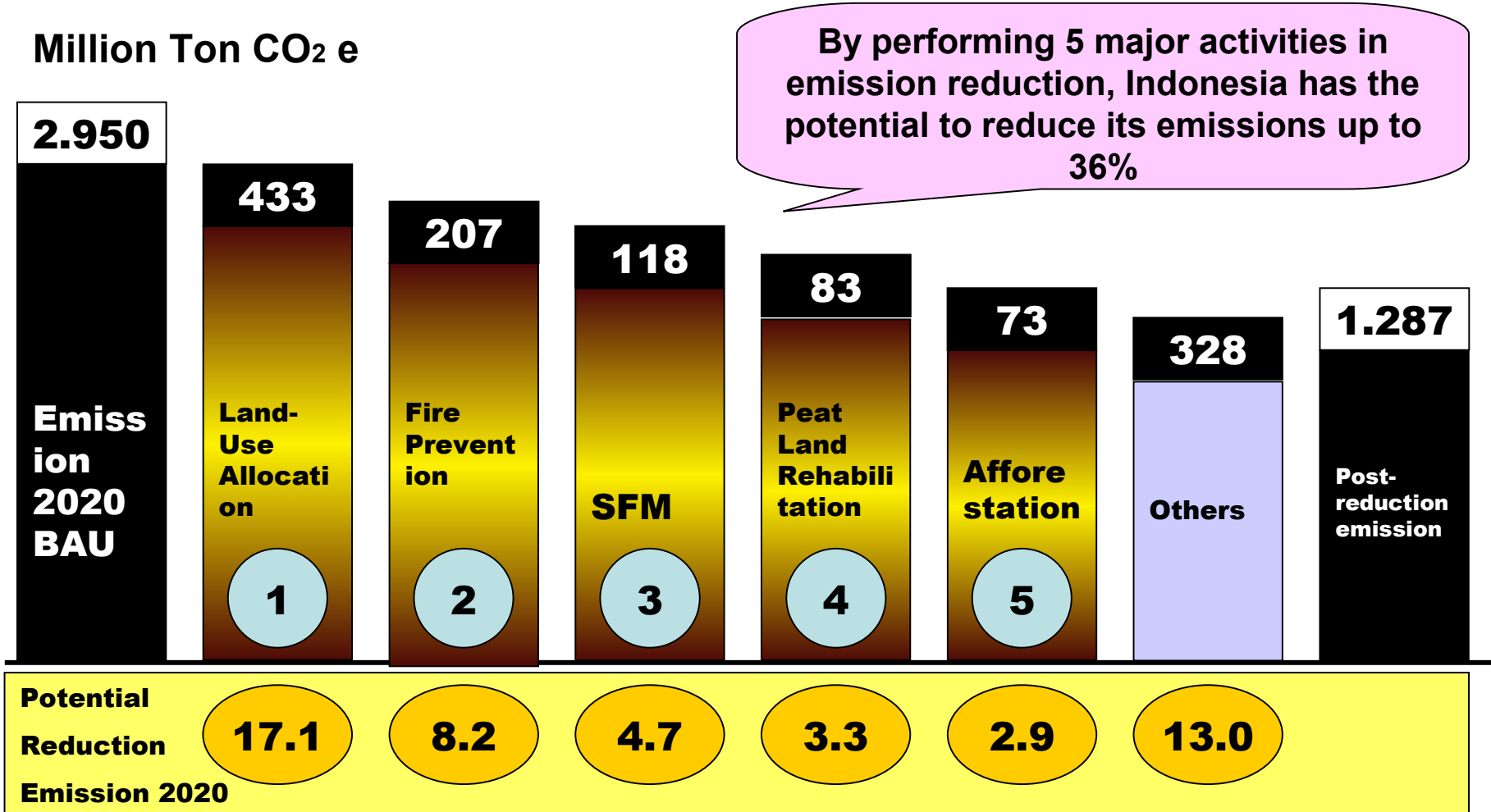


Source: MoF-Dirjen BPK





# Potential of Emission Reductions AFOLU in Indonesia



Source: DNPI



## **2. Potential of Green Jobs (GJ) In Forestry Industries**





# Green Jobs Progress To-date and Future Potential (1)

		GREENING POTENSIAL	GREEN JOB PROGRESS TO-DATE	LONG-TERM GREEN JOB POTENTIAL
<b>ENERGI</b>	Renewables	Excellent	Good	Excellent
	Carbon Capture and Sequestration (CCS)	Fair	None	Unknown
<b>BASIC INDUSTRY</b>	Steel	Good	Fair	Fair
	Aluminium	Good	Fair	Fair
	Cement	Fair	Fair	Fair
	Pulp and Paper	Good	Fair	Good
	Recycling	Excellent	Good	Excellent
<b>TRANSPORTATION</b>	Fuel-Efficient Cars	Fair to Good	Limited	Good
	Mass Transit	Excellent	Limited	Excellent
	Railways	Excellent	Negative	Excellent
	Aviation	Limited	Limited	Limited



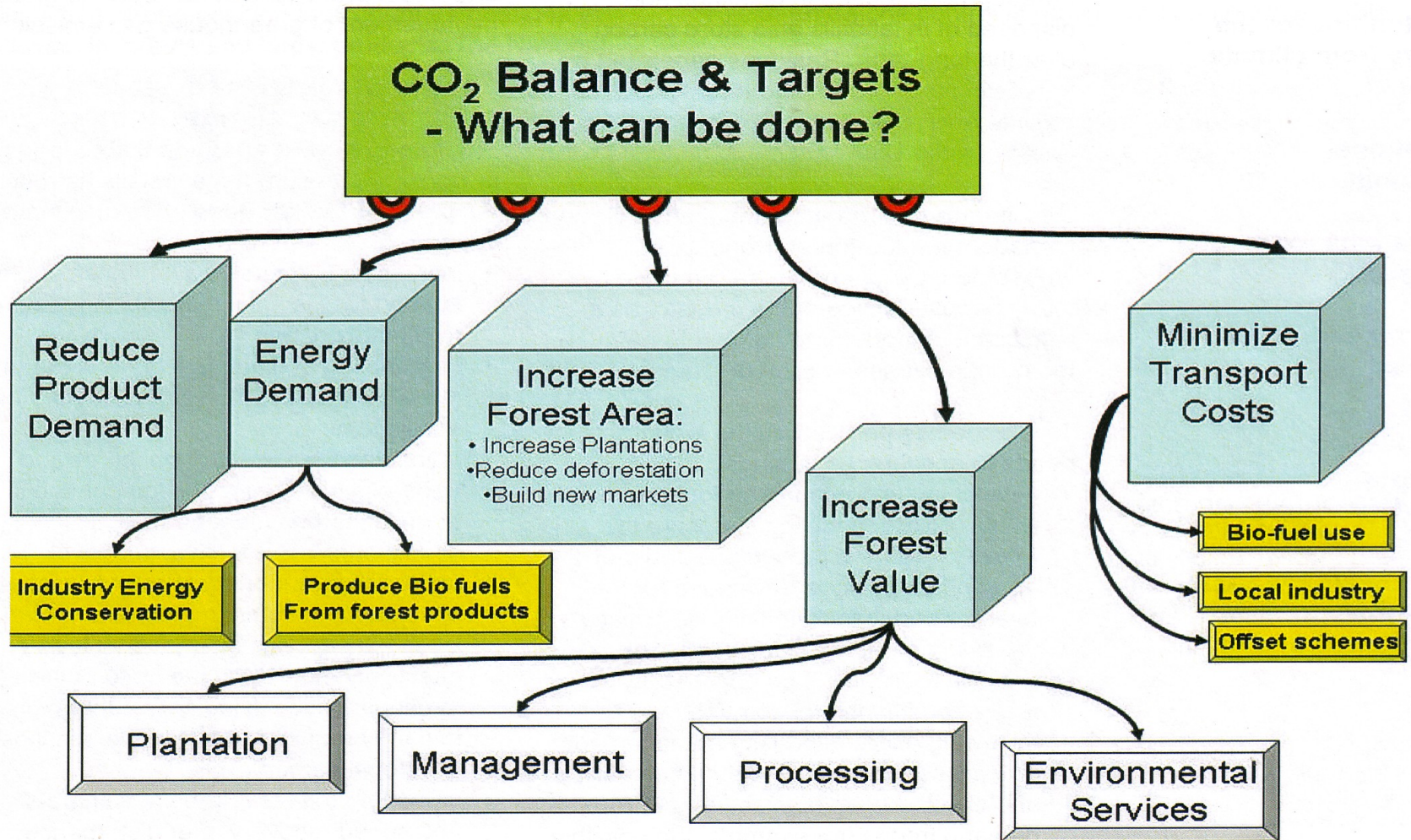


# Green Jobs Progress To-date and Future Potential (2)

		GREENING POTENTIAL	GREEN JOB PROGRESS TO-DATE	LONG-TERM GREEN JOB POTENTIAL
<b>BUILDINGS</b>	Green Buildings	Excellent	Limited	Excellent
	Retrofitting	Excellent	Limited	Excellent
	Lighting	Excellent	Good	Excellent
	Efficient Equipment and Appliances	Excellent	Fair	Excellent
<b>AGRICULTURE</b>	Small Scale Sustainable Farming	Excellent	Negative	Excellent
	Organic Farming	Excellent	Limited	Good to Excellent
	Environmental Services	Good	Limited	Unknown
<b>FORESTRY</b>	Reforestation/Afforestation	Good	Limited	Good
	Agroforestry	Good to Excellent	Limited	Good to Excellent
	Sustainable Forestry Management (SFM)	Excellent	Good	Excellent



# Opportunities





# Projection of Forest Restoration RI

Year	Community Forest (Ha)	Riverbank Protected Forest (Ha)	Planted Forest HTI + HTR (Ha)	Natural Conserv. Forest (Ha)	Partnership Comm. Forest (Ha)	Total (Ha)
2010	500.000	300.000	473.600	300.000	50.000	1.623.600
2011	500.000	300.000	503.200	350.000	50.000	1.703.200
2012	500.000	300.000	549.600	450.000	50.000	1.849.600
2013	500.000	350.000	556.800	650.000	50.000	2.106.800
2014	500.000	350.000	599.600	750.000	50.000	2.249.600
2015	500.000	300.000	449.600	300.000	50.000	1.599.600
2016	500.000	300.000	549.600	350.000	50.000	1.749.600
2017	500.000	300.000	499.600	450.000	50.000	1.799.600
2018	500.000	350.000	569.600	650.000	50.000	2.119.600
2019	500.000	350.000	549.600	750.000	50.000	2.199.600
2020	500.000	350.000	499.200	750.000	50.000	2.149.200
<b>Total (Ha)</b>	<b>5.500.000</b>	<b>3.550.000</b>	<b>5.800.000</b>	<b>5.750.000</b>	<b>550.000</b>	<b>21.150.000</b>

Source: MoF-Dirjen BPK





# Potential of Raw Materials

## A. Natural Forests

- Total commercial/processable timber = 3,285 B m<sup>3</sup>.
- Commercial timber diameter 50cm up (eligible for logging and processing) = 2,036 B m<sup>3</sup>.
- Sustainably harvested potential (35 years rotation) → 2.036 M/35yrs = 58,2 M m<sup>3</sup>/yr
- From real harvesting potential outputs 56% = 32,3 M m<sup>3</sup>/yr

## B. Industrial Plantation Forest

- Potential 20- 60 M m<sup>3</sup> per annum.

Source: Masyarakat Perhutanan Indonesia



# Forestry Sector: the “Greenest” Industry

- Wood is a building materials that is the most environment-friendly, compare to other materials, ie. Steel, aluminium and concrete, with following explanation :

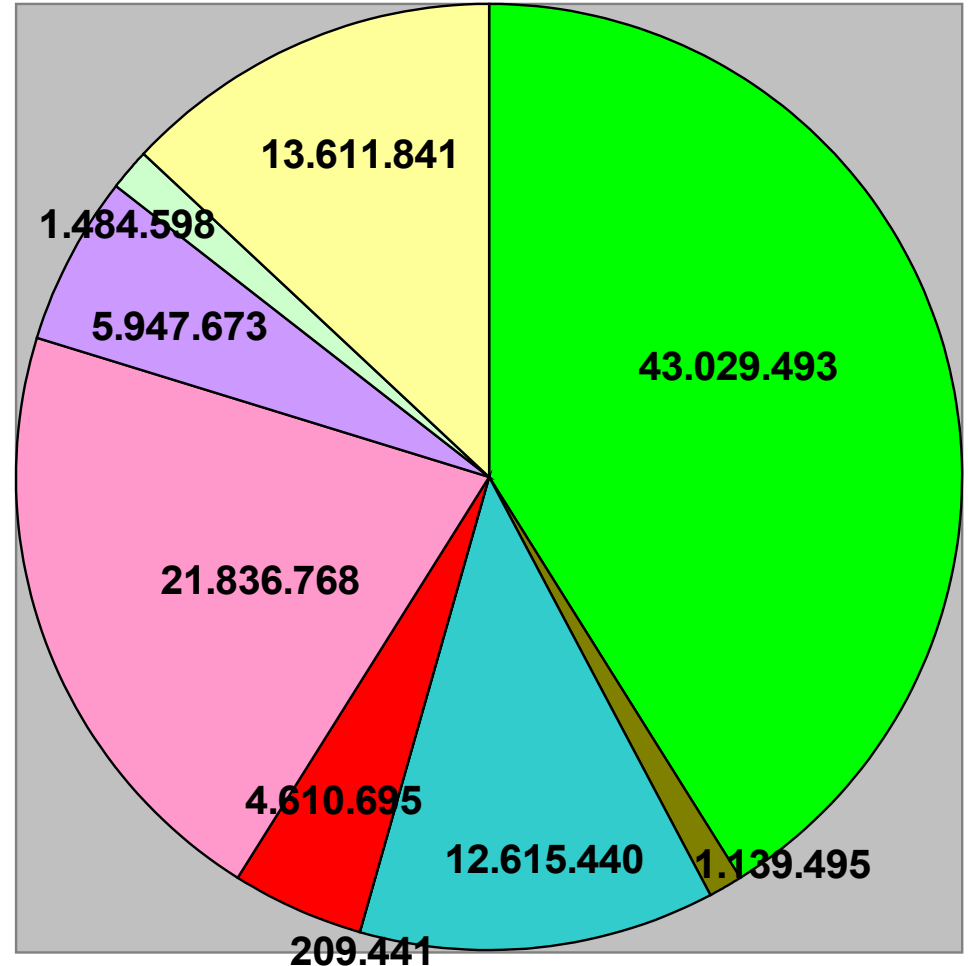
No.	Material	Energi yang terpakai (Fossil Fuel energy used) Mj/m3	Pelepasan Carbon (Carbon Released) kg/m3	Penyimpanan Carbon (Carbon Stored) kg/m3
1	Wood	750	15	250
2	Baja (steel)	266.000	5.320	0
3	Beton (Concrete)	4.800	120	0
4	Aluminium	1.100.000	22.000	0

- Wood extraction is also a renewable natural source product compared to other sectors



# Work Force and Sectors

- Agriculture, Forestry, Plantation, Hunting, Fisheries
- Mining and Excavating
- Processing Industries
- Electricity, Gas, Water
- Building
- Trade, Restaurant, Hotel
- Transportation, Warehouse, Communication
- Finance, Insurance, Building and Land Rental, Company Services
- Community, Social and Individual Services



Source: BPS (2009)





# Green Jobs Good Jobs?

Environment - NO Decent Work - NO <b>NO GREEN JOBS</b>	Environment - YES Decent Work - NO <b>NO GREEN JOBS</b>
Environment - NO Decent Work - YES <b>NO GREEN JOBS</b>	Environment - YES Decent Work - YES <b>GREEN JOBS</b>



### 3. Real Issues: Problems and Issues (1)

- Conditions of RI Forestry Industries:

#### INVESTMENT PERFORMANCE

Total investment in forestry sector of US\$ 27,77 Billions consisting of:

- Pulp & Paper US\$ 16 B (58 %),
- Plywood US\$ 3,3 B (12 %)
- Logging US\$ 3,28 B (12 %),
- Forest Plantation US\$ 3,00 B (11 %),
- Wood Processing US\$ 1,03 B (4 %),
- Furniture US\$ 0,80 B (3%)
- Wood Joint US\$ 0,19 B (1 %)
- Handycraft US\$ 0,17 B (1 %).

#### WORKFORCE

Directly employed 2,35 M, indirectly employed 1,5 M workers.

- Plywood 492.500 workers
- Furniture 472.000 workers
- Woodworking 370.000 workers
- Pulp & paper 178.624
- Industrial Plantation Forest 185.000 workers
- Logging 576.521 workers
- Handycraft 70.000 workers



### **3. Real Issues: Problems and Challenges (2)**

Workers Conditions in Forestry and Plantation Sectors  
(Nursery, planting, maintenance, harvesting, logging) :

- Low Skills
- Low Wages and Welfare
- High risks on occupational health and safety
- Minimum provision of Social Security and Health Insurance
- Child labour
- Discrimination of women workers wage and welfare
- Short employment contract & sub-contract (Labor Supplier)
- Temporary/seasonal work
- Informalised work



### **3. Real Issues: Problems & Challenges (3)**

- Workers Conditions in Forest and Plantation Products Processing Industries (Sawmills, Wood-working, Plywood, Pulp & paper, PKS/CPO, Rubber, Cacao) :
  - Generally labour intensive (except for pulp & paper: capital-intensive)
  - Low wages and welfare (pulp & paper relatively higher)
  - High risks on occupational health & safety
  - Minimum provision of Social Security and Health Insurance
  - Short employment contract & sub-contracting (Labor Supplier)





## 4. Trade Union Recommendation (1)

- Upgrading Forestry & Plantation Sectors
  - Combat against Illegal Logging
  - Revitalizing Forestry Industries
  - Restoration of Indonesian Forests
  - Investments (State & Private) for HPH-HTI-Biofuels
  - Law enforcement and Delineation
  - ‘Large’ Scale vs ‘Small’ Scale; Minimalising informalisation of industry and work
- Political Will Government/Regulator to support Sustainable Development
- Promoting Sustainable Forest Management (SFM) and Premium Price for Wood & Bio-fuels Certification



## 4. Trade Union Recommendations (2)

- Enforcement of Labour Laws and Workers Rights:
  - Freedom of Associations
  - Rights to Collective Bargaining
  - Anti-discrimination
- Improvement of working conditions
  - Minimise risks and hazards at work
- Improvement of Welfare & Productivity
  - Social security, health & pension insurances
- Improvement of workers skills through vocational trainings
- Long-term employment

**Wood Is Good**  
**Decent Work Is Better**

Thank You