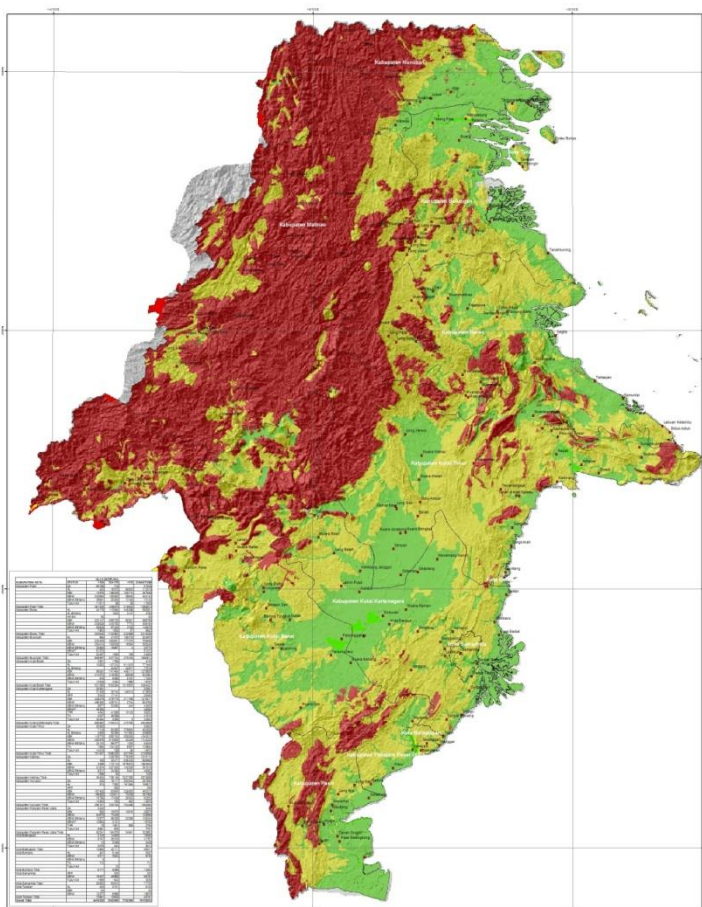


# Readiness on Emission Reduction in East Kalimantan

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Samarinda, East Kalimantan  
INDONESIA, 75123





PETA STATUS KAWASAN  
PROVINSI KALIMANTAN TIMUR  
BERDASARKAN METODE SKORING

1:1.000.000

Kelembagaan:  
 Departemen Perencanaan Wilayah dan Kota  
 Departemen Pekerjaan Umum dan Pengendalian Wilayah Perencanaan Wilayah dan Kota  
 Departemen Kehutanan dan Konservasi Sumber Daya Alam  
 Departemen Energi dan Pertambangan  
 Departemen Lingkungan Hidup dan Kehutanan  
 Departemen Pekerjaan Umum dan Pengendalian Wilayah Perencanaan Wilayah dan Kota  
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**Land Area**            19.695.875 ha  
**Sea Area**            2.102.721 ha

**Forest Area :**        12.920.647,89 ha (66% )  
**Protection Area:** 5.136.913,99 ha (26,27 %)  
**KBK Area :**            7.783.733,90 ha (39,59 %)  
**KBNK Area:**         6.629.903,10 ha

**Population:**            3,094,700 jiwa,  
**Population rate:**      2.73 %  
**Mean density:**        15.20/km<sup>2</sup>

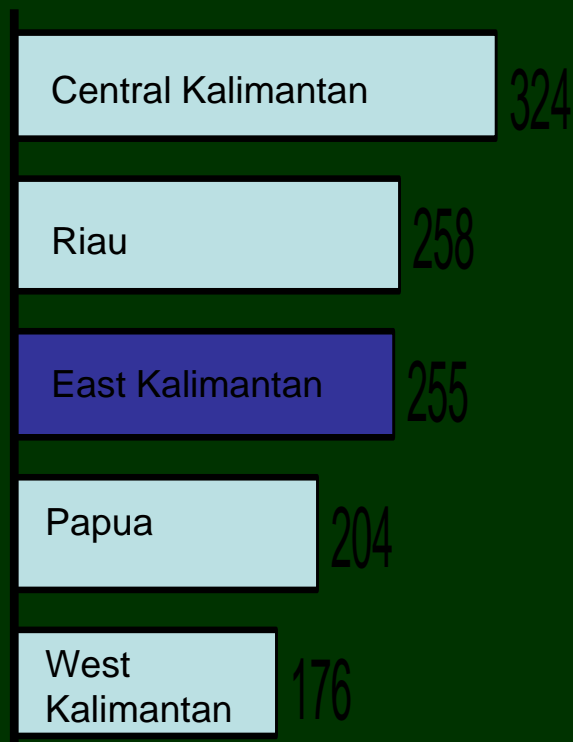
**The Gross Domestic Product (PDRB) is dominated by minning, industri and manufacturing sector.**

# KALIMANTAN TIMUR IS THE THIRD BIGGEST EMITOR CO<sub>2</sub> IN INDONESIA

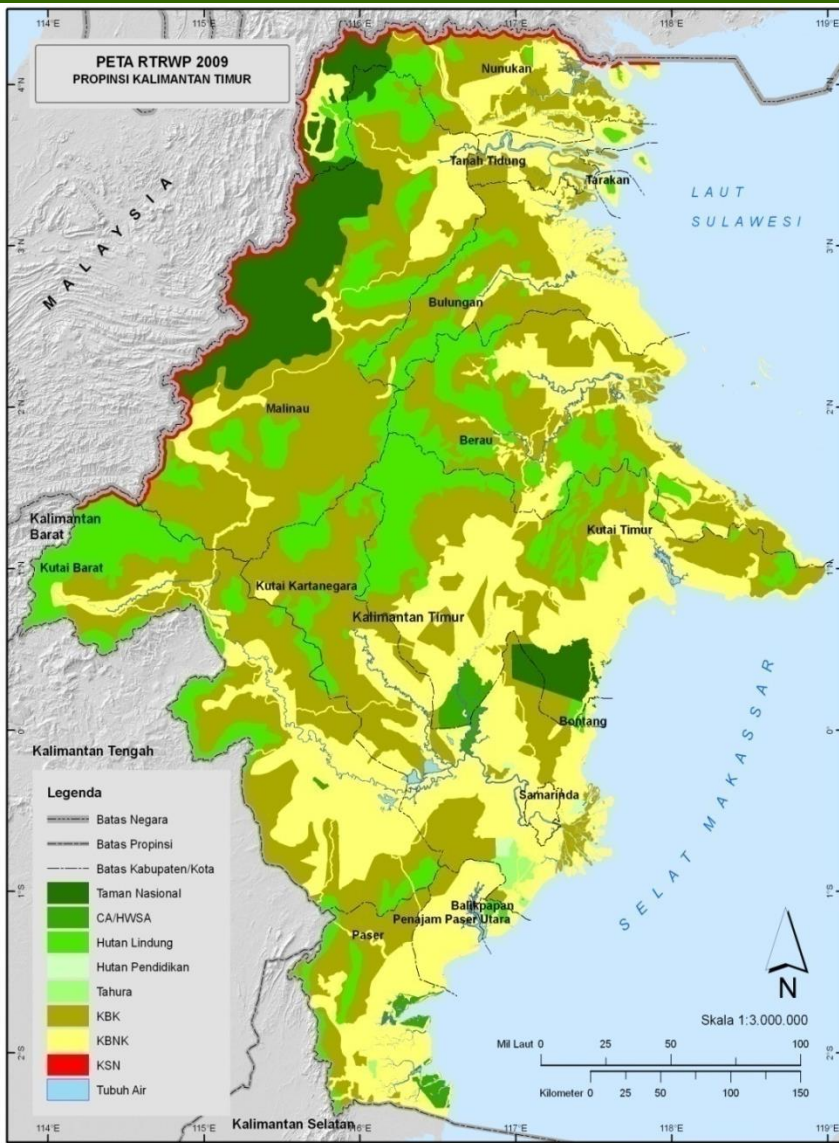


Top 5 biggest provincial emitor in Indonesia

(Mio tCO<sub>2</sub>e per year)



# KALTIM declares as KALTIM GREEN during KALTIM Summit in 7 January 2010



## Program *KALTIM Green* Programme :

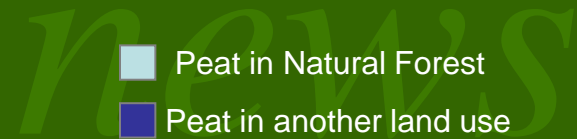
Environmentally oriented development with governmental base on environmental management

## *Aims to :*

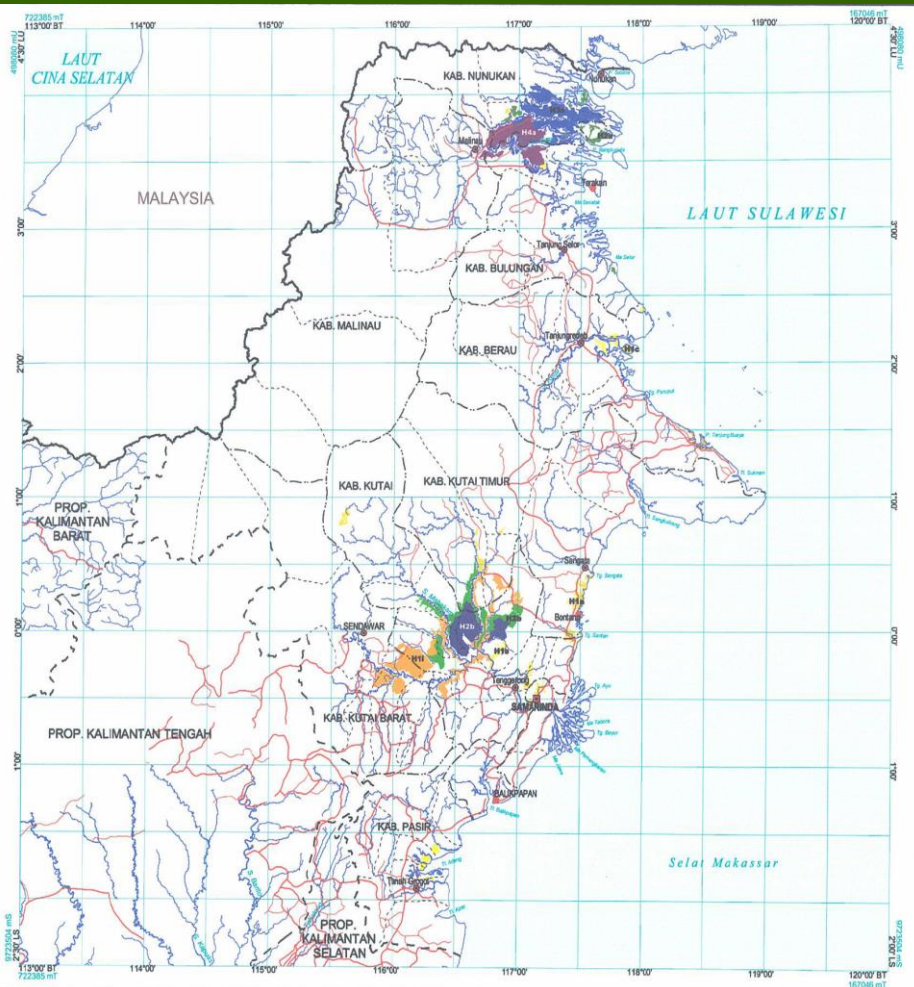
- Improve balance and comprehensive KALTIM people welfare,
- Reduce ecological threats, pollution and ecosystem quality damages.
- Increase knowledge and institutionalize ecological awareness and importance of renewable resources sustainability and wise uses of non-renewable resources.

# Most peat forest in East Kalimantan has already in degraded and deforested

## Keadaan lahan gambut di Kalimantan Timur (ha)

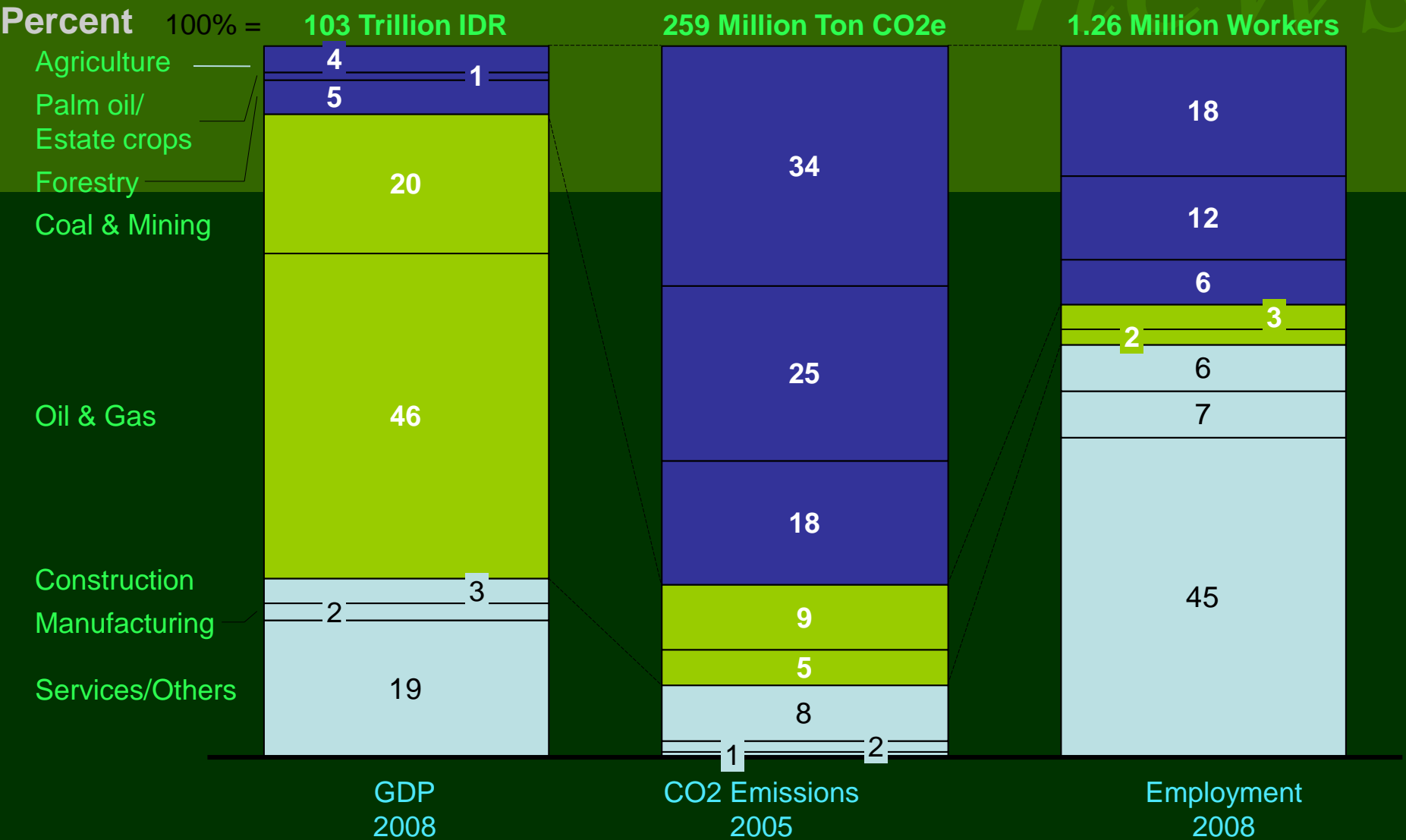


■ Peat in Natural Forest  
■ Peat in another land use





# Provincial emissions are dominated by agriculture and forestry sectors, which are also being counted on to drive future growth



SOURCE: BPS Kaltim; "East Kalimantan Environmentally Sustainable Development Strategy" by National Council for Climate Change and Government of East Kalimantan

# Emission by district, detail resources described

MtCO<sub>2</sub>e, 2010

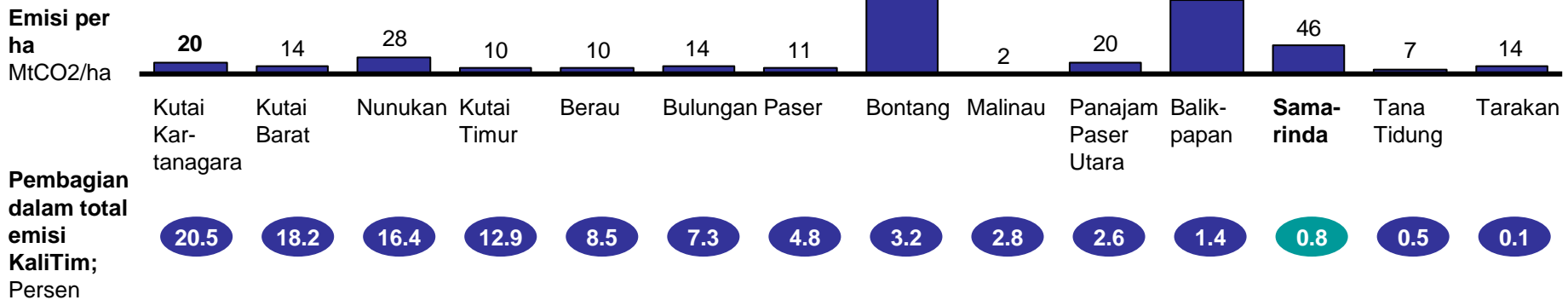
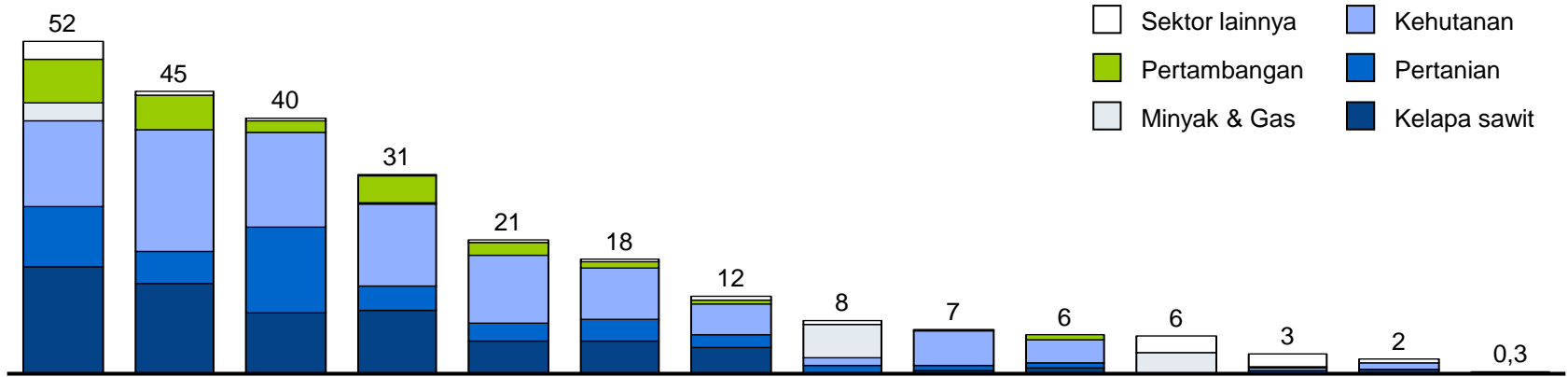


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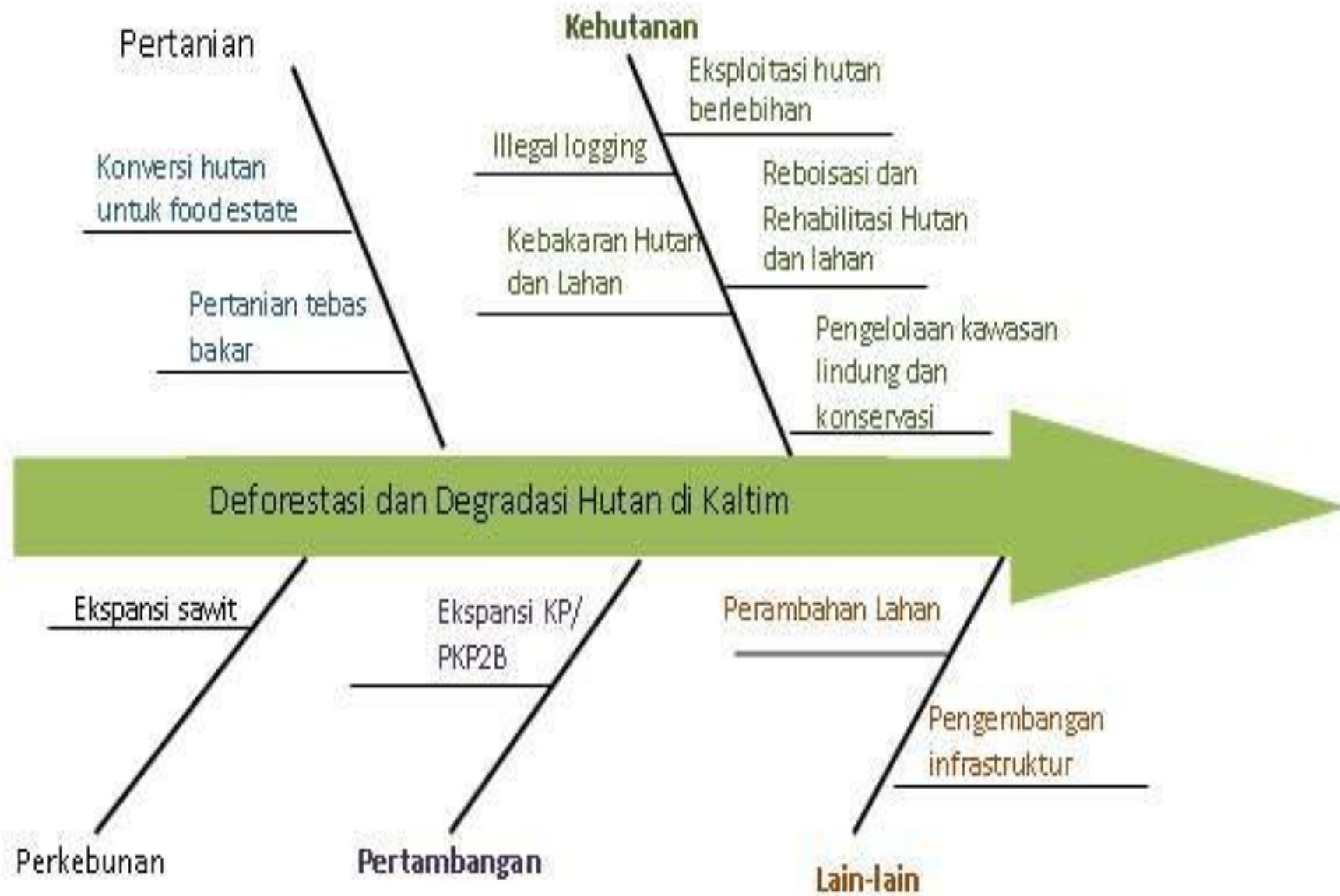
	Palm Oil Plantation				Agriculture			Forestry				Oil and Gas		Coal Mining			Others		Total	
	Kebakaran	Deforestasi	Pelapukan Gambut	POME <sup>1</sup>	Proses pertanian	Deforestasi	Kebakaran	Pelapukan Gambut	Hutan yang rusak	Deforestasi	Pelapukan Gambut	Kebakaran	Proses Hulu	Gas Flaring	Pengilangan dan LNG	Deforestasi	Proses Pertambangan	Pelepasan Metan		Lainnya
Balikpapan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-	-	3.3	-	-	-	2.5	5.9
Berau	2.6	1.7	0.7	0.3	0.2	1.5	1.0	0.3	4.7	3.9	0.5	1.3	-	-	-	1.5	0.8	0.4	0.4	21.8
Bontang	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.4	0.0	0.0	0.8	0.0	-	-	15.1	-	-	-	0.7	18.5
Bulungan	2.0	1.5	1.5	0.2	0.1	0.9	2.5	0.6	2.5	2.4	1.4	1.0	0.0	0.1	-	0.8	0.1	0.1	0.5	18.2
Kutai Barat	7.8	4.1	1.9	0.4	0.2	1.9	3.1	0.8	8.7	4.0	1.7	3.9	-	-	-	4.4	0.9	0.5	0.6	44.9
Kutai Kertanegara	5.6	6.0	4.6	0.7	0.8	0.9	7.7	2.0	1.8	2.7	4.2	2.8	5.9	1.4	-	5.4	1.5	0.8	2.8	57.6
Kutai Timur	4.5	3.9	0.8	0.8	0.7	1.4	1.7	0.5	6.3	3.1	0.8	2.3	0.3	0.2	-	3.7	8.1	4.3	0.2	43.6
Malinau	0.0	0.6	0.0	0.1	0.1	0.5	0.1	0.0	4.7	0.6	0.0	0.0	-	-	-	-	0.0	0.0	0.2	6.9
Nunukan	1.4	0.9	7.1	0.3	0.4	0.9	12.1	3.1	1.5	2.8	6.8	0.7	-	-	-	1.4	0.3	0.1	0.4	40.2
Panajam Paser Utara	0.4	0.6	0.0	0.1	0.2	0.4	0.0	0.0	2.6	0.8	0.0	0.2	-	-	-	0.7	1.4	0.8	0.1	8.3
Pasir	1.6	2.1	0.3	0.3	0.4	0.8	0.7	0.2	1.2	2.4	0.3	0.8	-	-	-	0.4	0.1	0.1	0.6	12.3
Samarinda	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	0.0	0.3	0.0	-	-	-	0.0	0.2	0.1	2.1	3.5
Tana Tidung	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	-	-	-	0.0	0.0	0.0	0.5	2.3
Tarakan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-	-	-	-	0.2	0.3
East Kalimantan	26.0	22.4	16.9	3.2	3.2	9.4	31.0	8.0	33.8	23.9	16.8	13.0	6.2	1.7	18.4	18.4	13.5	7.2	11.8	284.3

<sup>1</sup> Palm oil mill effluent

# Gross Emission of five sectors per hektar in each district of East Kalimantan (MtCO<sub>2</sub>e)







Some cause of deforestation and forest degradation in East Kalimantan

*news*

**Proposed Solution??**

# Spatial Plan of East Kalimantan

*news*

- ❖ New proposed plan is already submitted but still no response from both Forestry Dept and Parliament House.
- ❖ However still no environment, economic and social studies to support the KALTIM Green Economy concept.
- ❖ Mangrove and peatland area are still in heavy pressure from the illegal occupation
- ❖ High deforestation and forest degradation rate in response to the development and illegal occupation

# KALTIM GREEN Declaration

The KALTIM GREEN Declaration, agreed to by the Provincial and District governments across East Kalimantan, acknowledges the urgency of action to reduce greenhouse gas emissions and includes five commitments:

- 1) Carry out low carbon emission development;
- 2) Integrate sustainable development targets for the region;
- 3) Analyze and reform current development policy accordingly;
- 4) Promote the local research required to address climate change issues by supporting the province's network of universities and colleges (especially in forestry); and
- 5) Support mitigation efforts in cooperation with international institutions.

# REDD Activities

News

- DA Berau Carbon Forest (PKHB)
- DA-REDD Malinau
- Heart of Borneo (HoB)
- Wehea Protection Forest Management Model
- Low Carbon Growth Strategy Concept
- Development of FMU (KPH) in various sites

# 20 priority initiatives have been identified to reduce the carbon intensity of current activities and to grow downstream and low carbon sectors

## Reduce carbon emissions

Oil & Gas	Coal	Palm oil	Forestry	Agriculture
Reduce venting and flaring emissions	Revoke concessions in protected areas	Concessions to degraded lands	Implement reduced impact logging	Zero burning policy
	Enforce good mining practices e.g.rehabilitation	Zero burning land clearance	Use degraded land for plantations	Rehabilitate opened peat land
	Flare/use methane leakage			

## Grow low carbon and high value add sectors

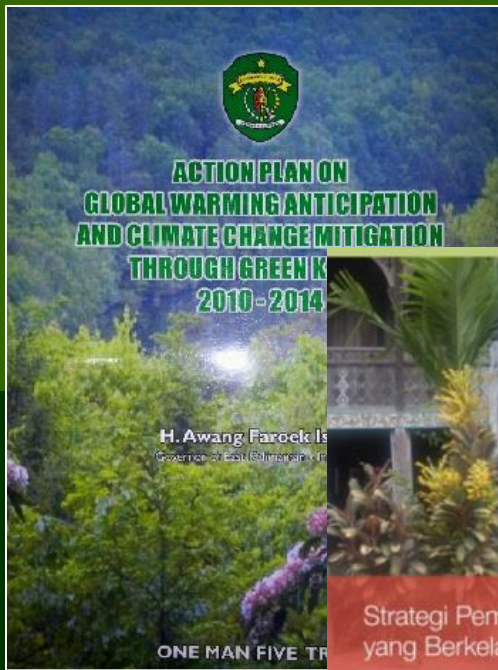
Accelerate exploration	Use methane leakage	Raise land productivity	REDD readiness	Raising yields
Develop CBM potential		Build crude palm oil refinery in East Kalimantan	Develop 2.6m ton capacity pulp & paper and forest products mills/plant	New crops and aquaculture
Develop new LNG/petro-chemical complex				



# The 5 biggest initiatives to reduce CO2 emissions

	Description	Abatement, 2030
<b>1</b> Zero burning policy 	<ul style="list-style-type: none"> <li>Prohibiting fire in use for land preparation</li> <li>Strengthening fire brigade and stronger enforcement</li> </ul>	<b>47.0 MtCO2e</b>
<b>2</b> Reduced impact logging 	<ul style="list-style-type: none"> <li>Better enforcement of selective cutting rules in logging concessions</li> </ul>	<b>34.0 MtCO2e</b>
<b>3</b> Use of degraded land 	<ul style="list-style-type: none"> <li>Redirect new agriculture production to already degraded land</li> </ul>	<b>25.3 MtCO2e</b>
<b>4</b> Reduce peat decomposition 	<ul style="list-style-type: none"> <li>Raise the water table in degraded peatland</li> </ul>	<b>18.0 MtCO2e</b>
<b>5</b> Reforestation 	<ul style="list-style-type: none"> <li>Plant new trees on degraded forest land</li> </ul>	<b>12.0 MtCO2e</b>

# Established document related to GHG in East Kalimantan



Januari 2010



Mei 2011

Agustus 2012



Oktober 2012



*news*

**Thank You**