Lao National Greenhouse Gas Inventories





GHG inventory and reporting process

Organisational arrangement

•The GHG inventory teeam including TWG and sub-TWGs were establihsed and trained

Data collection and literature review

• Tools, activity data from national and sectoral stastical reports and other sources were collected and reviewed. GHG TWGs and stakeholder interview and focus group meetings were also held to support the process

Selection of tools and methods

• Following data collection and literature review, a tool, 2006 IPCC guidelines and software, which was considered as a best tool, were selected and use for the inventory

GHG calculation, analysis and reporting

• By using 2006 IPCC guidelines, software and GPGs

• Reporting followed the IPCC General Guidance and Reporting, incluindg taking into account TACCC and key notations.

GHG inventory review and validation

• As a QA-QC, the review and validation performed by the invenotory team including TWGs, relevant organisaitons and stakeholders by sharing the inventory report, validation workshop and consultation meetings.

• GHG inventory was then included in the BUR

International Consultation and Analysis (ICA)

Once the BUR is technically endorsed by TWGs and MONRE, it shall be ICA

Finalization and approval

- Finalization of the BUR following the ICA
- Revisit, approval, publication and submit to the UNFCCC by DCC, MoNRE

Figure1: GHGI and reporting process

Total Emissions in 2014 in Lao PDR



Figure 2. Total Emissions in 2014 in Lao PDR

- The net emissions was 24,099.98 GgCO_{2eq}
- AFOLU, especially forest remaining forest, crop land remaining cropland and lands converted to forest had a capacity to remove emissions equivalent to about 13,000 Gg. AFOLU sector had net emissions of 18,793.41 GgCO_{2eq}, which was the largest sources of emissions, accounting for about 78% of the total emissions.
- Second largest source of emissions was Energy Sector, which emitted 3,729.42
 GgCO_{2eq} (15%). The rest, IPPU and Waste shared 5% and 2%



Energy

In 2014, total emissions from energy sector were 3,729.42 Gg, accounting for about 17.08 % of the national total emissions.

Fuel combustion in transport and other sectors are highest emission. shared 62.31% (2,332.40 Gg CO2eq) and 27.96 % (1,042.01 Gg CO2eq) rep respectively



Industrial process and Product use

Categories	(Gg)			CO2 Equivalents(Gg)			
	CO2	CH4	N2O	HFCs	PF Cs	SF6	Other halogenated gases with CO2 equivalent conversion factors (1)
2 - Industrial Processes and Product Use	1,151.890	0	0	0	0	0	0
2.A - Mineral Industry	1,090.245	0	0	0	0	0	0
2.A.1 - Cement production	1,087.294						
2.A2 - Lime production	2.951						
2.A.3 - Glass Production	NO						
2.B - Chemic al Indus try	NE/NO	0	NE/NO	0	0	0	0
2.C - Metal Industry	61.646	0	0	0	0	0	0
2.C.1 - Iron and Stee1Production	61.646	NO					
2.D - Non-Energy Products from Fuels and Solvent Use	IE/NO	0	0	0	0	0	0
2.E - Electronics Industry	-	0	0	NO	NO	NO	0
2.F - Product Uses as Substitutes for Ozone Depleting Substances	-	0	0	NE/NO	NE/NO	0	0
2.G - Other Product Manufacture and Use	-	0	0	0	NE/NO	NE/NO	0
2.H - Other	-	0	0	NE	0	0	0

- Laos has 2 relevant industries: Mineral (Cement, lime) and Metal (Iron rod production)
- □ Totally emitted 1,151.89 Gg CO₂ , 2014.
- Cement industry emitted 1087.29
 Gg CO2e, which accounted for
 94.93% and lime and iron
 production, which were 2.95 Gg
 CO2 (0.26%) and 61.65 Gg CO2
 (5.25%) respectively (figure4)

Figure4 Emissions from IPPU sector

2

Agriculture, Forestry, and Other Land Use



- 3.A Livestock
- 3.B Land

3

3.C - Aggregate sources and non-CO2 emissions sources on land

3.D - Other

In 2014, total emissions from AFOLU sector was 18,793.41 GgCO_{2eq}

Land and Land use were largest emission source. Its net emissions were 9,093.48 GgCO_{2eq} or about 48%. Livestock and aggregate source and non-CO2 emission equalled 21%. Smallest emissions was 10% from harvest wood product

Waste



In 2014, total emissions from Waste were 423.68 GgCO2e. 87% emissions were from wastewater treatment, and discharge, and 13 % from Solid waste Disposal. The smallest emission were from solid waste incineration and open burning, and biological treatment, sharing 0.19%, 0.03% respectively.

