



Asosiasi Pengusaha Hutan Indonesia



KONTRIBUSI SEKTOR USAHA KEHUTANAN TERHADAP CAPAIAN NDC INDONESIA

FGD POJOK IKLIM

Jakarta , 30 Januari 2019

Submission of national mitigation action plan and REL

National level government

Negotiated provincial mitigation action plan and REL

Province level government

Negotiated district mitigation action plan and REL

District level government

Recognition from PARIS AGREEMENT for NON PARTY STAKEHOLDERS (i.e. private sector)

- Capacity strengthening
- Data

HPH/HTI/RE : 30,62 Mio Ha of 68,85 Mio Ha Production Forest



KONDISI SEKTOR USAHA HULU KEHUTANAN

No.	IUPHHK	Jumlah Izin (Unit)	Luas (Juta Ha)	RKT (2018)
1.	Alam	254	18,52	199
2.	Tanaman	291	11,18	92
3	Restorasi Ekosistem	16	0,65	16
	Jumlah	561	30,35	307

Catatan :

*) Sumber : Ditjen PHPL (2018) , Kementerian LHK
Diolah APHI (2018)

**Total Luas Hutan:
120,58 Juta Hektar**

PROGRAM AKSI MITIGASI SEKTOR KEHUTANAN BERDASARKAN “ ACTIVITY BASED”

NDC Mitigasi Sektor Kehutanan terbagi kedalam 4 Program Aksi :

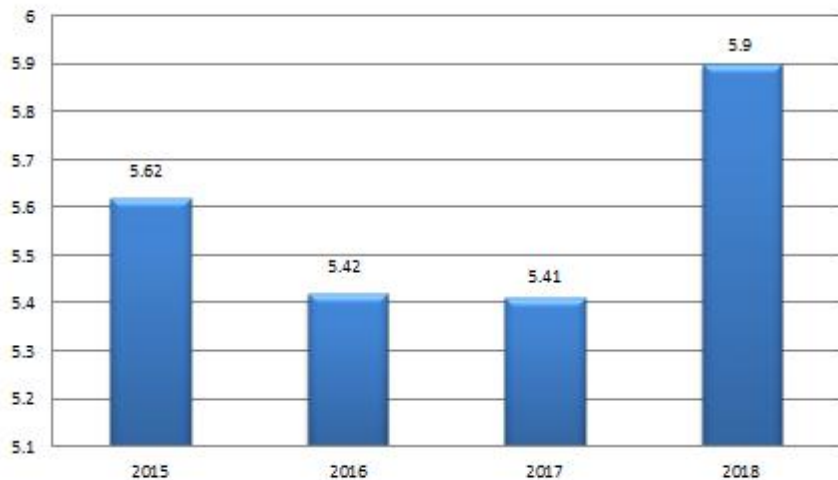
- 1. Penurunan deforestasi (< 0,45 ha- 0,325 Mha/tahun di 2030) dan degradasi hutan**
- 2. Peningkatan penerapan prinsip pengelolaan hutan berkelanjutan, baik di hutan alam maupun di hutan tanaman.**
- 3. Rehabilitasi 12 juta ha lahan terdegradasi pada tahun 2030 atau 800,000 ha/tahun dengan survival rates sebesar 90% .**
- 4. Restorasi 2 juta ha gambut pada tahun 2030 dengan tingkat kesuksesan sebesar 90%**

Catatan : (Dalkarhutla termasuk di dalamnya)

PENGELOLAAN HUTAN ALAM DAN MITIGASI PERUBAHAN IKLIM



Produksi Kayu Bulat Hutan Alam Tahun 2015-2018



$$V = \left(\frac{0,25 \cdot \pi \cdot d^2 \cdot t \cdot f}{10.000} \right) \cdot f_e \cdot N$$

RIL ← --- SILIN

RIL & SILIN → Peningkatan produktivitas hutan alam & mitigasi perubahan iklim (penurunan emisi & peningkatan karbon stok)

PENERAPAN RIL



Dwima Group : Experiences of RIL Implementation

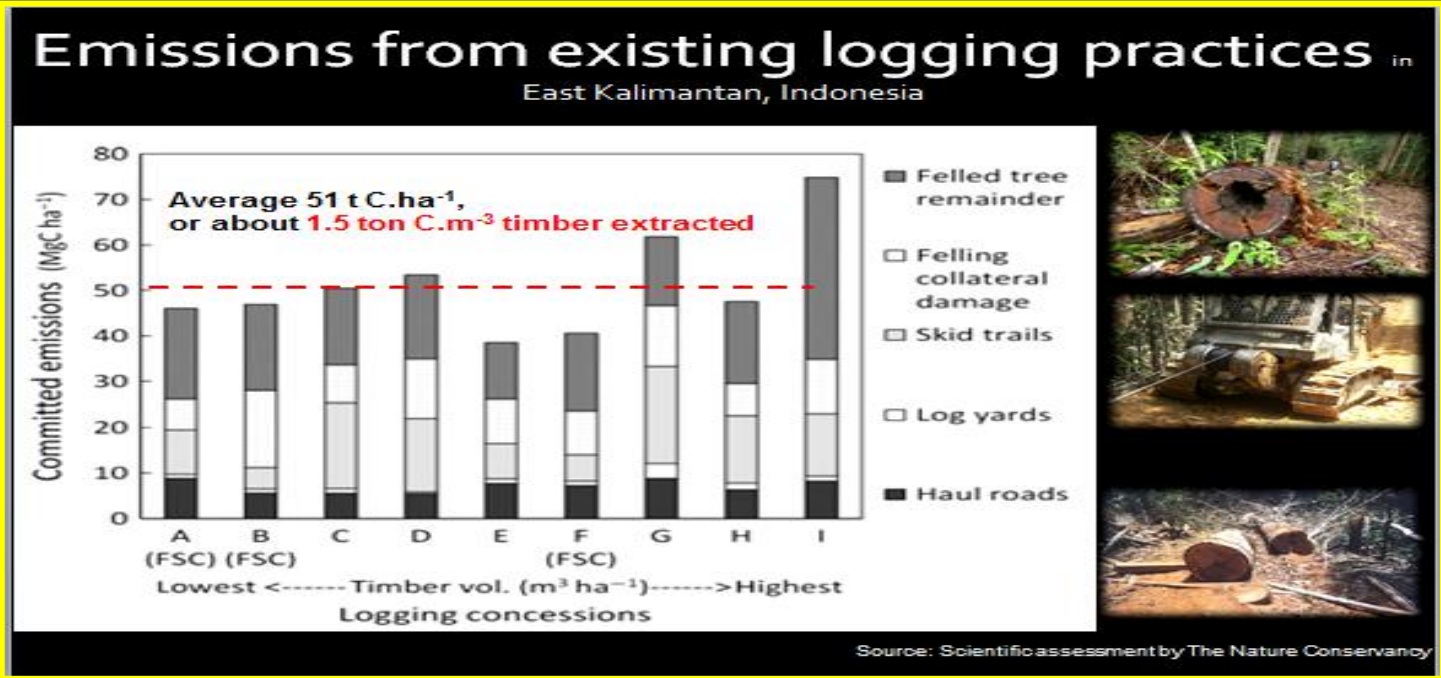


RIL practices have been implementing at Dwima Group, Central Kalimantan Province since 2008 and adopted by 7 concessions of natural forest member of Dwima Group with some benefits as follow :

- a. All harvesting activities can be controlled and measured,
- b. Reducing impact of logging activities : decreasing opened of forest area, decreasing disturbance of remaining trees of forest stand, decreasing soil compaction and avoiding soil erosion
- c. Increasing productivities and income of workers up to 30 % (chainsaw and tractor operators and others)
- d. Reducing cost of heavies equipment operation (spare parts, fuel, maintenance)

Why RIL → RIL-C ?

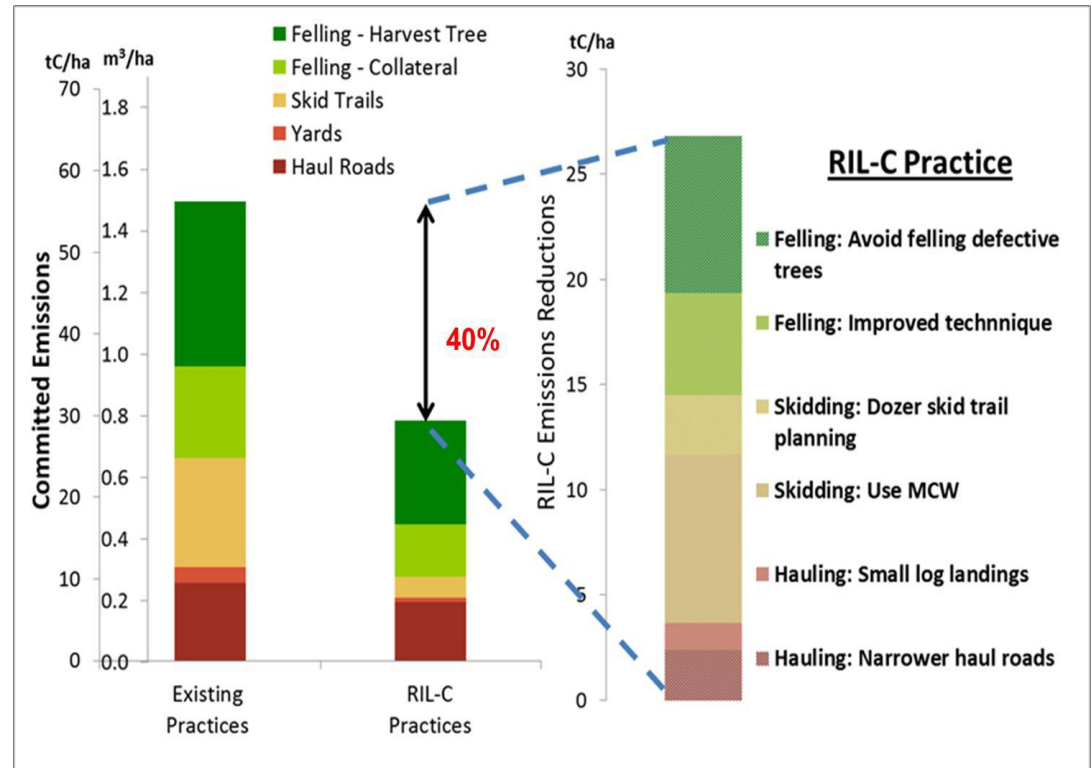
- Poor logging activities contribute significant carbon emissions.
- Currently, 265 logging concessions of natural forest (200 active concessions) manage about 20 million ha of natural forest in Indonesia, 153 unit (SFM certified) and 50 unit (legal certified) are certified through Indonesian TLAS (SVLK)
- Up to now (April 2018) 25 concessions of natural forest are FSC certified (SFM) and 7 concessions are on going process to get SFM certificate of FSC



RIL-C potentially reduce the emissions 40% compare to baseline
Ultimately RIL-C would **avoid** the potency of **deforestation and support the achievement of Indonesian TLAS/SFM**

How much emission reduction from RIL-C?

- Baseline : Average logging emissions of 51.1 tons C/ha (effective logging area)
- RIL-C reduces 26 - 50% of baseline emissions



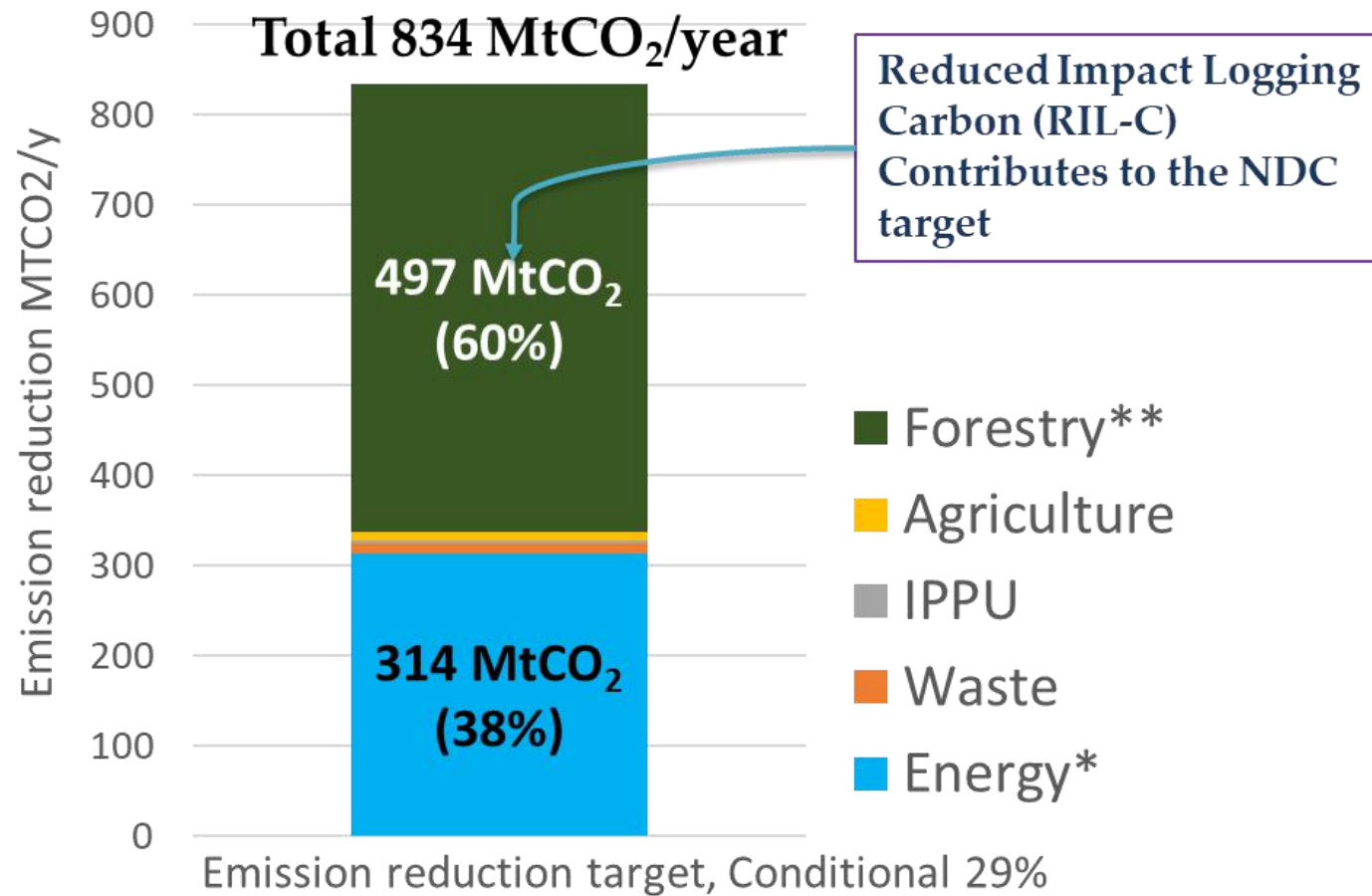
- Assumed 40% emission reduction and annual cutting blocks of logging concessions in Indonesia 466,667 ha. RIL-C could potentially reduce **6.6 Million tons C/year** or **24 Million tons CO²/year**

Source : (Ruslandi, TNC : 2008)



FIRST NATIONALLY DETERMINED CONTRIBUTION
REPUBLIC OF INDONESIA

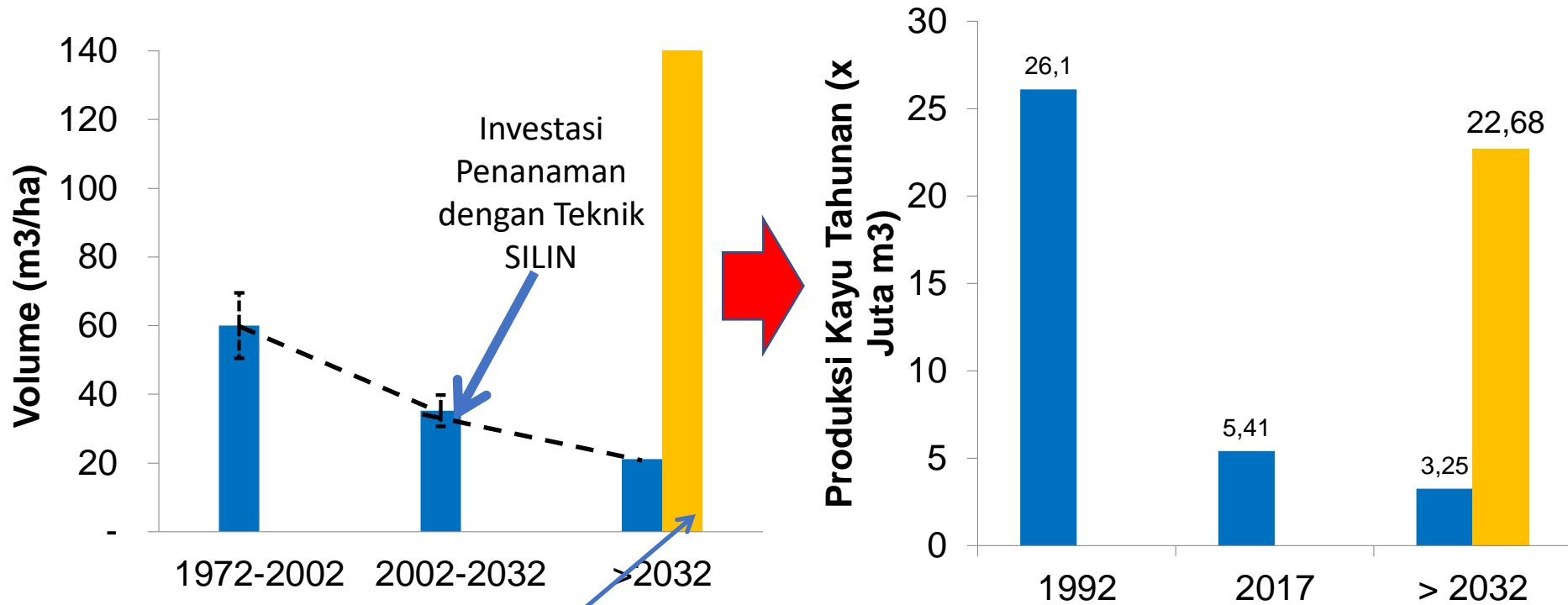
RIL-C is a prioritized solution to meet the NDC target.



PENERAPAN SILIN



POTENSI PRODUKSI KAYU ALAM (TPTI) DAN TPTJ SILIN



Hasil Penanaman Teknik SILIN

- ☐ Penanaman Teknik SILIN memanfaatkan areal 20% dari landscape kawasan IUPHHK
- ☐ Produktivitas teknik silin > 3 x dari potensi hutan alam

Luas areal (x juta ha) TPTI	61.4	18.9	18.9
RKT (x juta ha)		0,5	0,63
SILIN (20% total areal)(xjuta ha)		0,126	0,126
Produksi kayu (xjuta m ³)	SILIN		22,68
	TPTI		3,25

Perbandingan Biaya dan Hasil antara TPTI, TPTJ SILIN (Model Tanam Jalur dan Penanaman Rumpang)

TPTI



- Produktivitas rendah
- Pohon yang ditebang: 8 – 10 pohon per Ha, 30 m³/ha atau
- **Produksi kayu per petak (100 ha) = 3.000 m³**

TPTJ Intensif Model Tanam Jalur



- Produktivitas tinggi
- Potensi Pohon yang ditebang 160 pohon/Ha= ± 150 m³/ha
- **Produksi kayu per petak (100 ha) = 140 m³ x 50 ha = 7.000 m³/petak**
- **Produksi jalur antara = 3.000 m³**
- **Total Potensi per petak 10.000 m³**
- **Biaya Pembuatan tanaman SILIN Rp 8,037,488**

TPTJ Intensif Model Penanaman Rumpang



- Produktivitas tinggi
- Potensi Pohon yang ditebang 300 pohon/Ha= ± 300 m³/ha
- **Produksi kayu per petak (100 ha) = 300 m³ x 20 ha = 6.000 m³/petak**
- **Produksi jalur antara = 3.000 m³**
- **Total Potensi per petak 9.000 m³**
- **Biaya Pembuatan tanaman SILIN Rp 17,074,10/ha**

POTENTIAL BIOMASS AND CARBON STOCK DARI TPTJ SILIN

Biomass 506,65 ton/ha

**Carbon
Stock** 253,33 tonC/ha

(Siregar & Dharmawan, 2011)

TANTANGAN

- *Policy approach* → sudah terbit peraturan yang mewajibkan RIL dan SILIN (Perdirjen PHPL No. P.9/PHPL/SET/KUM.1/11/2018 tentang Pedoman Penerapan RIL dan Perdirjen No. P.12/PHPL/SET/KUM.1/12/2018 tentang Pedoman Teknik SILIN) → masih terbatas penerapannya
- *Scale up* RIL dan SILIN → perlu insentif fiskal (DR dalam Rupiah, Pengurangan tarif DR, pengakuan aset tanaman SILIN)
- Insentif untuk pembangunan rendah karbon → percepatan implementasi Perpres 77 Tahun 2018 tentang Pengelolaan Dana Lingkungan Hidup
- Belum tersedia mekanisme monitoring dan sistem verifikasi RIL dan SILIN pada tingkat nasional (terkait penurunan emisi dan peningkatan stok karbon)
- Belum tersedia mekanisme *benefit sharing* untuk UM yang mencapai target penurunan emisi → untuk diajukan dalam *carbon trading*

TERIMA KASIH

