



Forest Conservation: The Indonesian Carbon Opportunity

May 2023

Carbon Markets

There are 3 types of carbon markets: Mandatory, Voluntary, and Quasi-Mandatory:

MM

Mandatory Market

By far, the largest markets for trading Carbon Credits (“CC”) are the MM, where participants are obliged by law to purchase CC offsets to “cancel” their surplus emissions over their allocated quota. Such markets include the EU ETS, UK, South Korea, Japan, Australia, New Zealand, California, Washington, and China.

Only restricted types of CCs qualify as offsets in the MM, often based on geographical origin e.g California, Australia.

VCM

Voluntary Credits Market

It has no basis in law to require participation but is based on participant’s voluntary commitments to offset their emissions. Such commitments derive from societal pressures (shareholders, Board of Directors, SEC, Pension Funds, Banks, Investors) to reduce GHG emissions.

Article 6 of the Paris Agreement will not be operational until mid-2024. Its effects are not yet evident in the VCM but it is anticipated that it will cause a bifurcation of the VCM into 2:

2 Types of VCM

ARTICLE 6 CCs

Substantial demand, causing strong upward prices. High-grade Corporates and Governments will only buy Article 6 CCs because of stricter qualification criteria, UN oversight and no double-counting

NON-ART.6 CCs

Lower grade Corporates and human persons will buy these

QMM

Quasi Mandatory Market

Over time what started as a voluntary commitment turns into a quasi-mandatory one as the pressure groups causing the commitment in the 1st place makes it impossible default on the commitment.

VCM → QMM

Supply and Demand



In all types of goods with price elasticity, it is the interaction of supply and demand that dictates prices and volumes.



While prices provide signals to the MM and QMM markets, demand in these segments is somewhat inelastic as the CC requires to be bought irrespective of its price.

In assessing statistics relating to supply / demand, the following needs to be borne in mind:

1

For VCM supply, we need to delete production of CC types that are used in the MM. Those prices are elevated and all CCs capable of qualifying will head there rather than the VCM. Thus, those CCs are not competition for the VCM.

2

The most accurate way to determine demand is the statistics for retirement (which means someone has actually used the CC). Many market statistics are based on transactions (eg the monetary size of the market annually can be computed by aggregating all the transactions) but a transaction may be between associated parties or a purchase by speculators.

3

Issuance statistics can be skewed by eg Suspension of issuance in Indonesia, moratorium in Papua New Guinea, suspension of Kariba / other projects. This can create reduced issuances (which could be interpreted as reduced supply when in fact it is deferred supply; thus the market stats in aggregate are correct over a period of years but may not represent generation accurately each year. Covid also caused deferred issuances.

Supply and Demand

Corporates Net-Zero Commitments

Demand can sometimes be deferred e.g Corporates making Net Zero commitments at 2030 sometimes do not set interim goals e.g X% reduction by 2025 and the full reduction by 2030 or do not set annual emissions reductions goals.

For those corporates, it is possible to still meet their commitments by 2030 and they defer purchasing CCs for a year or 2 near term.

Such behaviour can be observed during the current period of Ukraine War, increasing interest rates, inflation and recession.



Net Zero Commitments



Other Intervening Demand Events

Other intervening Demand events are:

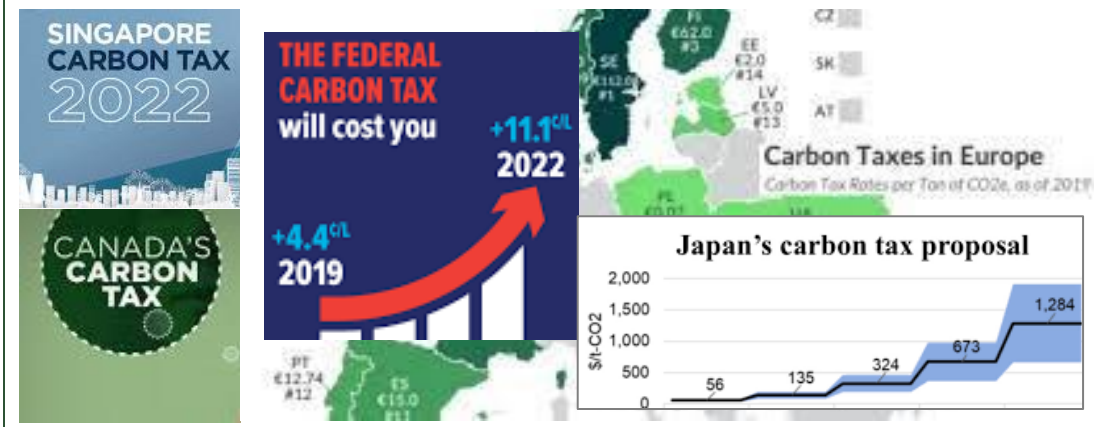
- (i) Tokenization – 20m CCs in 2021; demand vanished in the crypto fall out of 2022.
- (ii) Carbon Taxes (“CT”) : these are being introduced all over the world; in Developed countries, the level of CT is quite high e.g \$50/tCO₂e. Some CT regimes (e.g Singapore) allow a certain % of total tCO₂e used by entities subject to the CT to offset their liabilities by buying qualifying CCs.



Tokenization



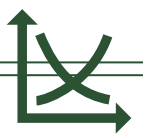
Carbon Tax



Supply-Demand Dynamics

The supply/demand equation is dynamic, not static:

- (a) Lower prices cause higher demand, but higher demand unmet by increased supply causes increased prices later.
- (b) Higher prices incentivize the creation of more supply with a time lag of c 2/3 years.



Supply



Registries

12



Projects

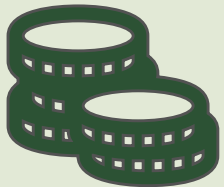
>20,000



Countries

>150

Nature Based Credits 2022 issuances:



236_m CCs

Existing Supply Overhang as at 31 December 2022 (i.e issuances that aren't retired):

	Millions CCs
AFOLU	450
Renewable Energy	250
Other	100
Total	800



But Article 6 will cease usage of the vast majority of this Overhang.



Emissions Gap: the UN has assessed the Emissions Gap at:

Net zero pledges sufficient to meet 2030 targets	100%
Net Zero pledges at end 2021 (to keep to 2c increase)	25%
Net Zero pledges at end 2021 (to keep to 1.5c increase)	14%

Societal demand continues to increase from all sources of same

Shareholders	Consumers	Young People
Banks	Boards of Directors	Investors
	Pension Fund Trustees	

Large corporate Net Zero 2030 Covenants:

2019	500
2020	1,000
2021	1,400
2022	1,850

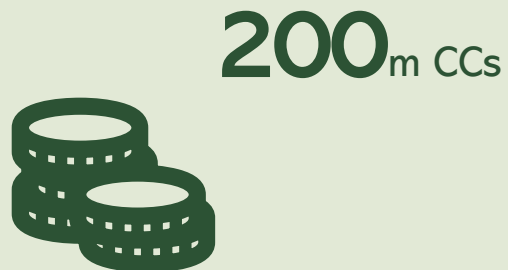
- TSCVCM: projects demand to increase between a minimum of 5x and a maximum of 15x by 2030.
- Governments until now were not a large feature in the VCM. Due to difficulties in developed countries attaining 2030 NDC targets, very substantial Government CC buying will take place 2024 forward for Art 6 CCs.
- Corporates / persons will try to do the easy thing 1st to reduce emissions. After they are done, it becomes progressively more expensive and more difficult to reduce by each marginal extra %. CCs present an attractive choice to achieve GHG targets in those circumstances.

Conclusion: Strongly increasing and persistent demand for CCs

Adjust for demand deferment
(Ukraine/ Recession):

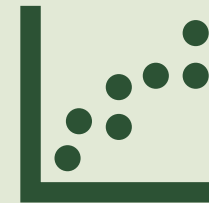


2022 retirements unadjusted:



Change in Demand Pattern

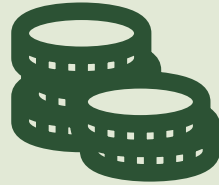
- Article 6 likely to kill the demand for <2020 CCs (Art 6 does not allow <2013 CCs to qualify; 100+ Governments have agreed not to use <2020 CCs)
- Cheap purchasers will buy non-Art 6 ; the rest will buy Art. 6
- Government will only buy Art 6
- Government have almost no presence currently in the VCM; virtually all their future demand is additional to now
- Demand likely to concentrate on Article 6 CCs that have Sustainable Development Goal DG and Climate, Community, and Biodiversity Gold badges
- Only 19% of projects have 5+ SDG badges
- Indonesian REDD+ should be able to qualify for both SDG + CCB Gold badges



What's in it for Indonesia?

There are 2 flows of money Indonesia can access from CCs:

The state assets Indonesia owns: e.g its forests



- As Indonesia has existing commitments to the World Bank and may prefer to do Art 6 deals with other Govts, we are not quantifying revenue flows from these assets
- These relate to State-owned unallocated lands. This document does not attempt to estimate revenues from unallocated lands, but only the allocated lands.



Revenue flows from REDD+ projects it licenses



- Iuran
- Land Tax
- Tax on salaries
- VAT on purchases, consumables, and Consultancy advices
- Corporation tax
- Withholding tax
- Taxes that occur due to the multiplier effect of the REDD+ projects
- Carbon sales levy
- SRN Unit issuance fee
- SRN Unit transaction fee



How does INDONESIA ensure it gets these transformative climate and financial results?

Carbon Credit (t CO₂-e)

30 Years Lifecycle

18.8_{bn}

Verified Carbon Units

US\$ **540**_{bn}

Public spending
(incl. economic spillover effect)

US\$ **165**_{bn}

taxes
(corporate, individual, levy, land tax)

5.3m

Job creation

Adjusted
Indonesia Rainforest
➤ **51,168,442 ha**

US\$ **9.3**_{bn}

job creation & salaries

US\$ **2.8**_{bn}

spending in local economy

US\$ **5.4**_{bn}

taxes
(corporate, individual and indirect)

2.5m

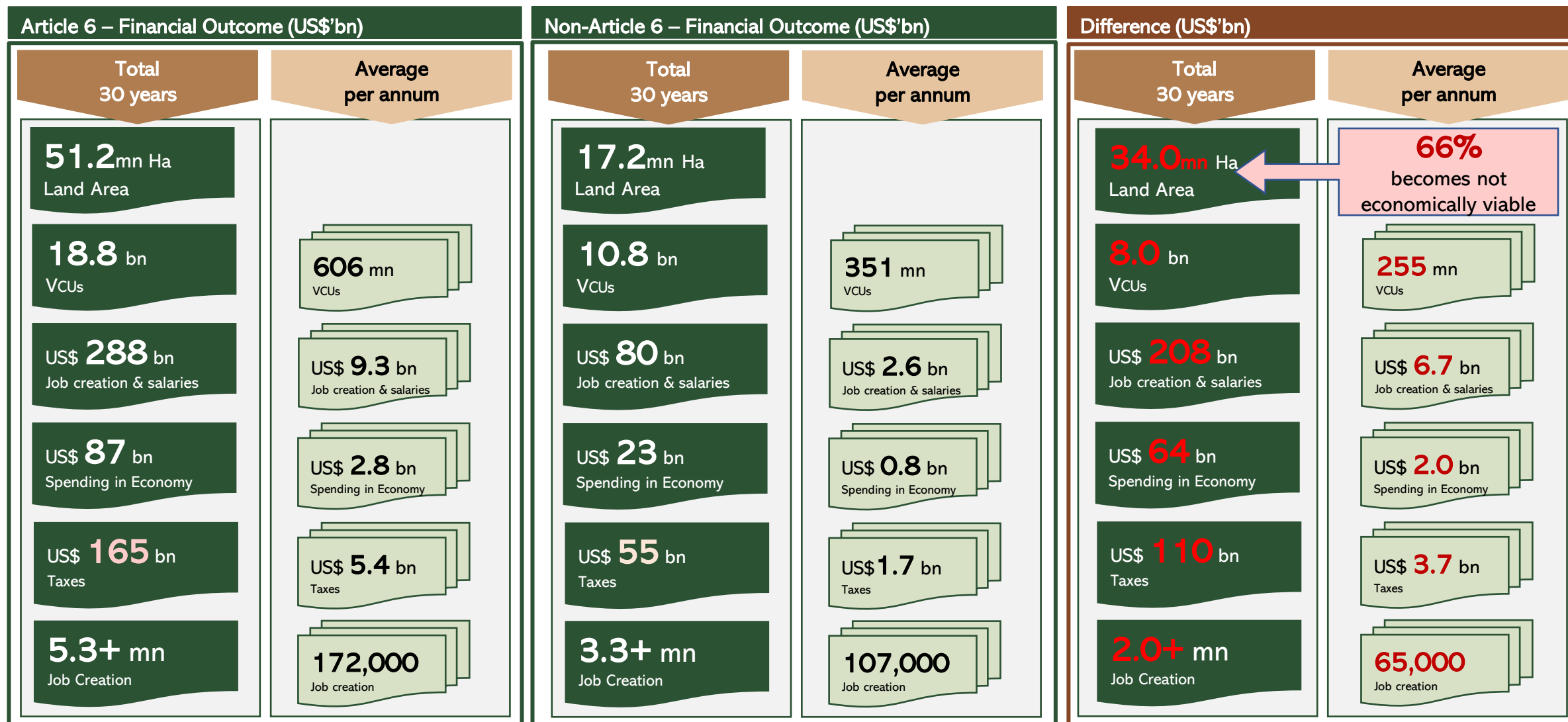
jobs creation in first 10 years



Average Annual Effect

Financial Potential

- Should Indonesia's REDD+ not qualify for Art.6 of the Paris Agreement, 66% of forests will not be economically viable for conservation



*(Including Economic Spillover Effect)

How does INDONESIA ensure it gets these transformative climate and financial results?



Key Drivers

- 1 Methodologies:** Provide suitable methodologies that allow these amounts of CCs to be issued
- 2 International Trading:** Provide mechanism for international trading of credits (through mutual recognition or dual registration).
- 3 LOAA Eligibility:** Confirm eligibility of conservation projects for Letters of Approval and Authorization for Article 6 trading
- 4 Inclusion of Avoidance Credits:** Indonesia (and other rainforest nations) to ensure REDD+ avoidance credits are definitely included in Article 6 trading at UNFCCC / SBSTA / COP 28.



INDONESIA CARBON
TRADE ASSOCIATION
ASOSIASI PERDAGANGAN KARBON INDONESIA

Appendix

Financial Potential and Assumptions

Financial Potential*

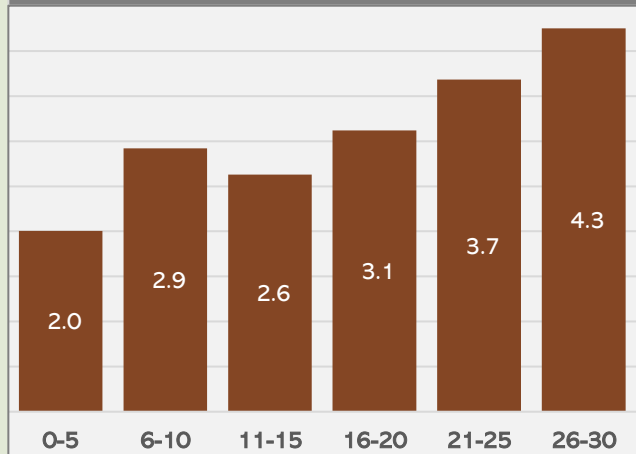
Forest area

51m ha of Indonesia forest – can produce

Type	Area (ha)	Per Year (t.CO2e)
APDD	7,546,763	200,743,896
LtPF	13,492,935	134,929,350
ARR	5,226,223	37,106,183
AUDD	15,202,521	136,822,685
CIW / RWE	9,700,000	711,010,000
Total	51,168,442	1,220,612,115

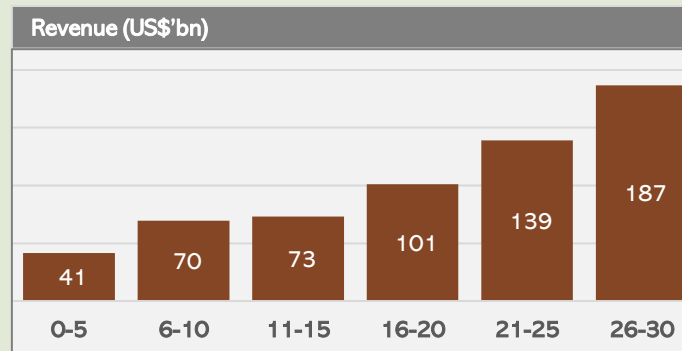
It has the potential to generate **18.8 bn** VCUs within a 30 years lifecycle (or **648 mn** VCUs or tCO_{2-e} per annum on average)

Verified Carbon Units ("VCU")("bn)

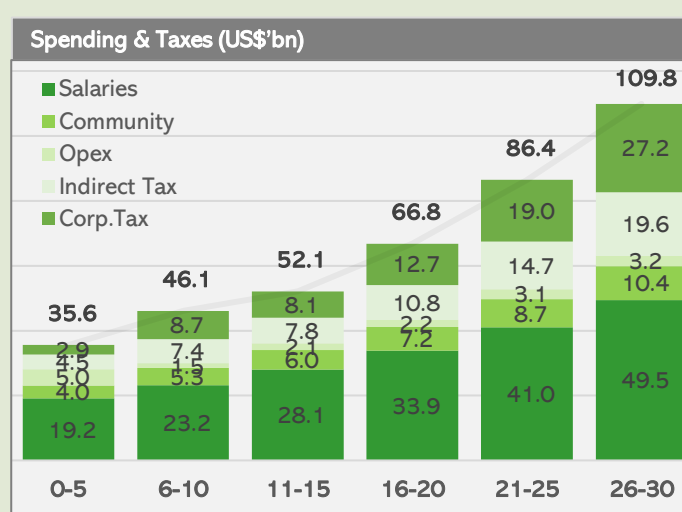


Lifecycle revenue and spending (US\$'bn)

Potential to generate **US\$ 611 bn** in revenue



Potential to generate **US\$ 397 bn** direct spending

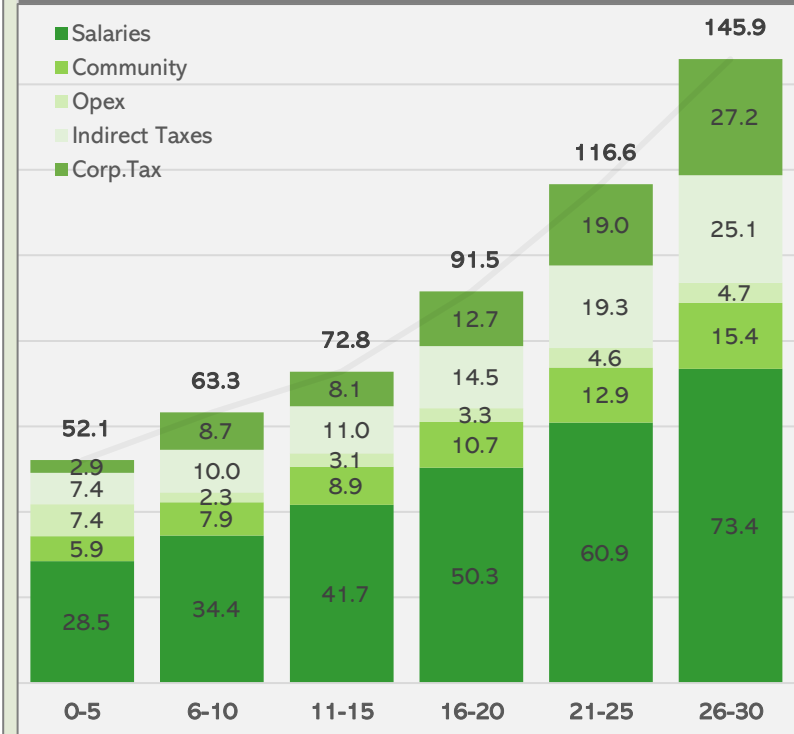


Economic spillover effect (US\$'bn)

Extrapolated to include the multiplier effect, it is estimated to have **US\$ 542 bn** positive impact to Indonesian economy across the 30 years lifecycle.

US\$ 289 bn in local workforce,
US\$ 87 bn to local communities and economy, and
US\$ 166 bn in taxes (levy, luran, land tax, indirect and corp. taxes)

Economic Spillover Effect (US\$'bn)

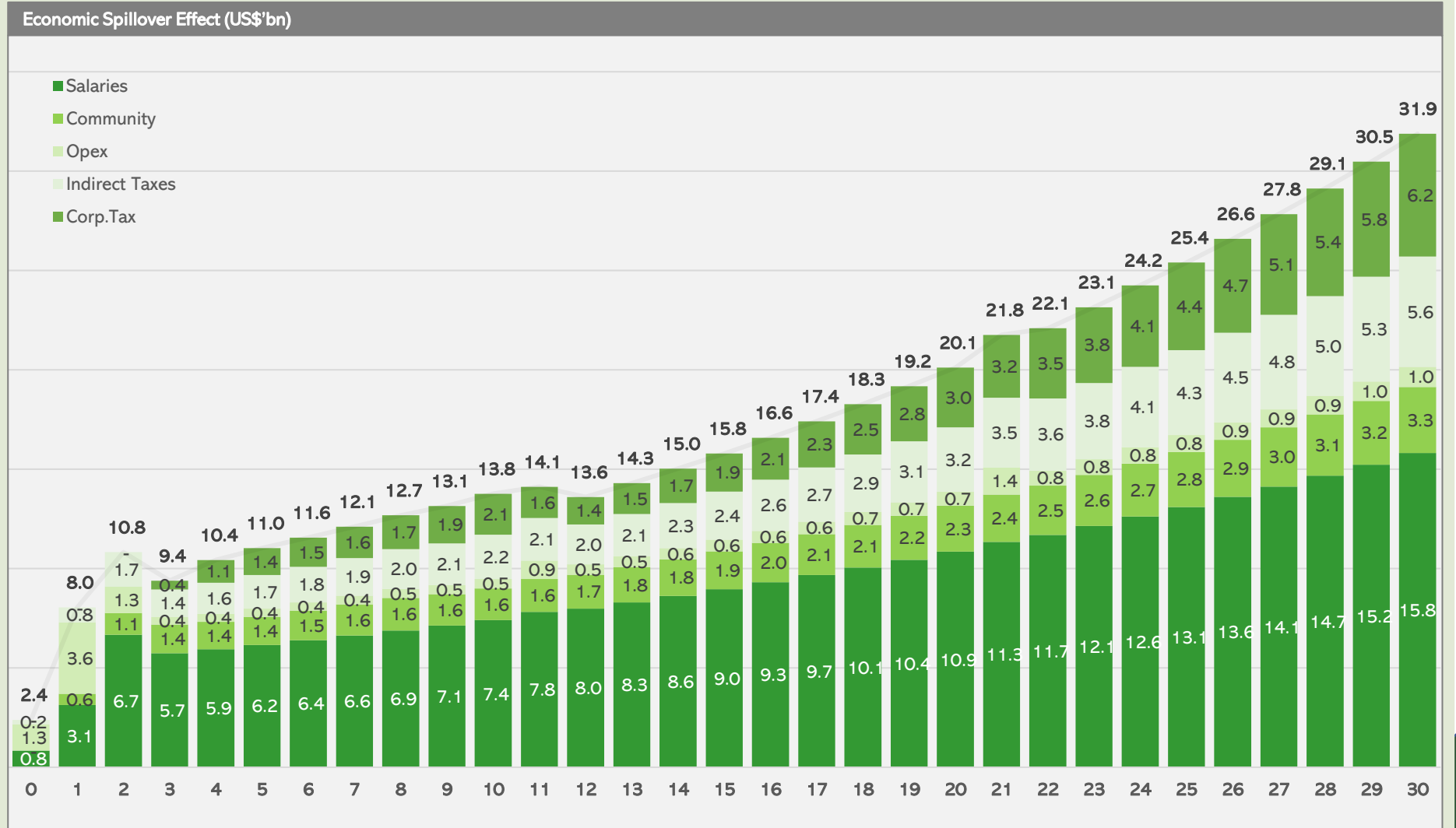
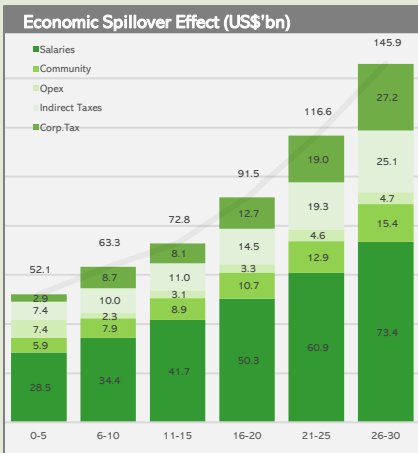


*the figures relate to FOLU only and Indonesia has plenty of other Carbon opportunities in addition

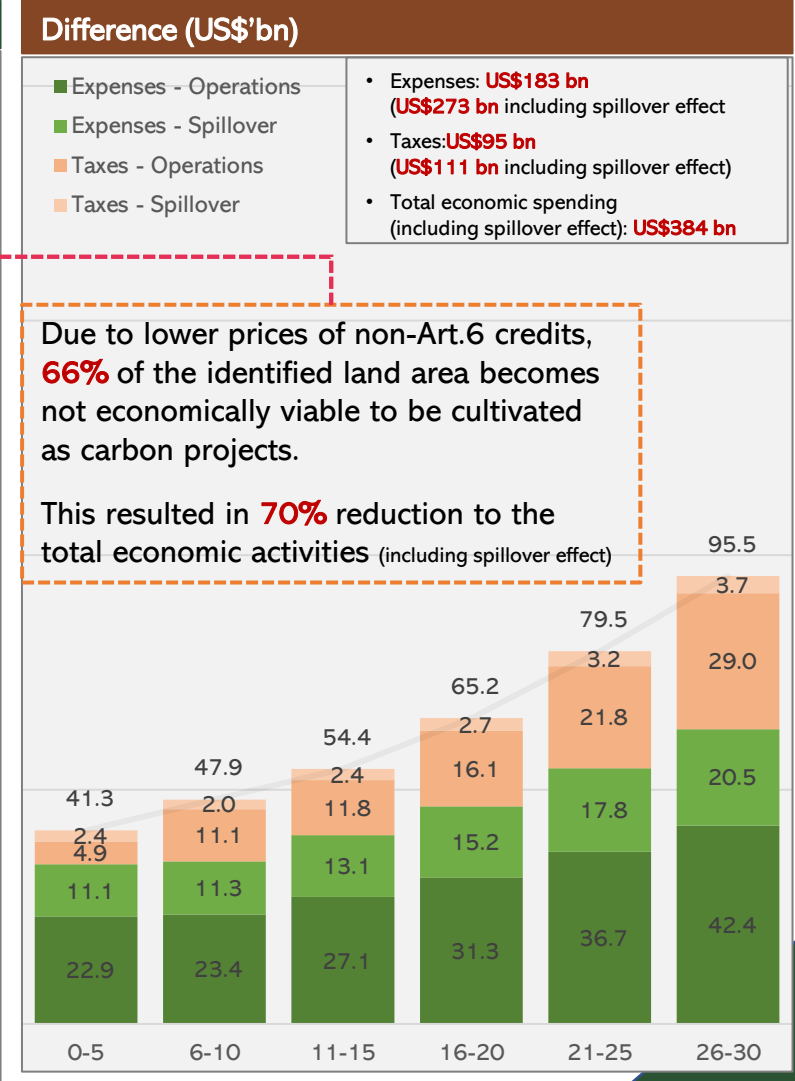
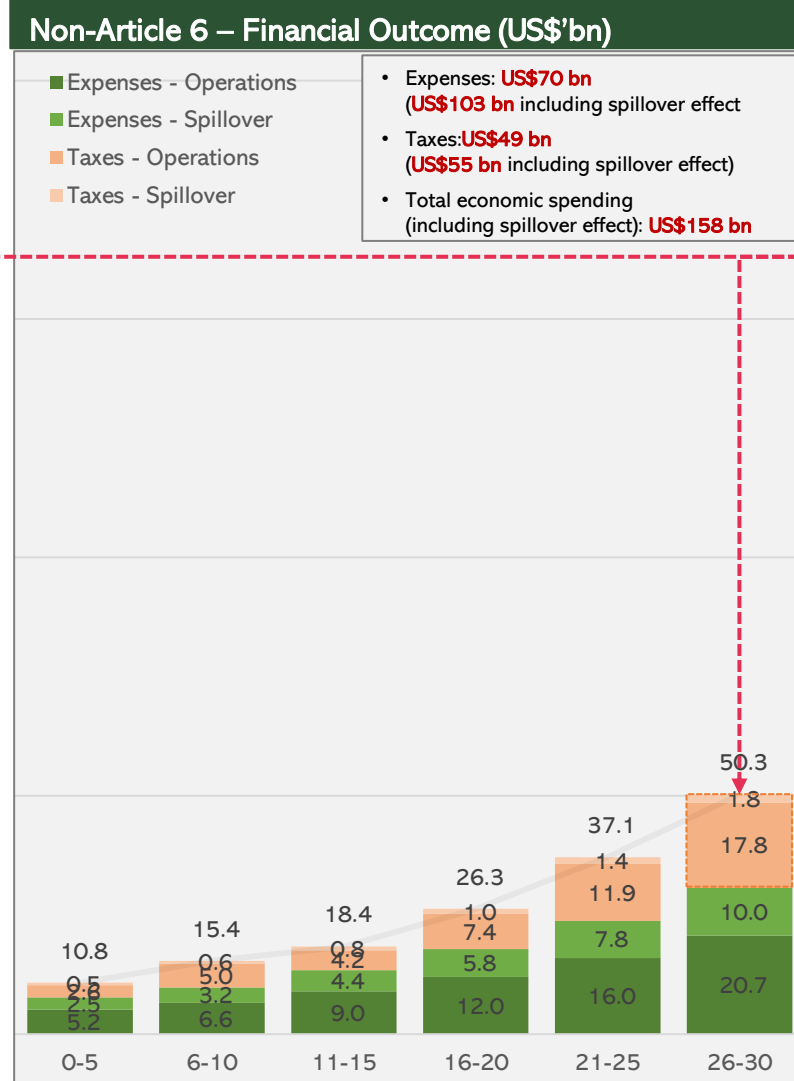
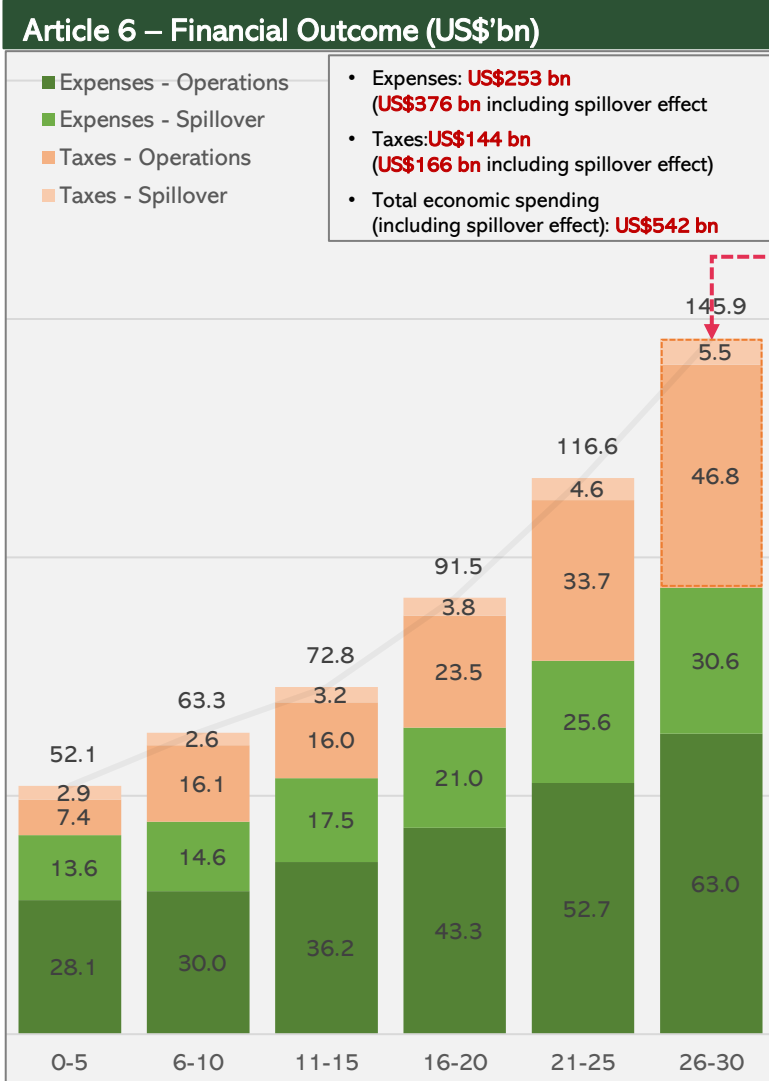
Financial Potential

The economic spillover effect of US\$ 542 bn translate into average annual economic impact of US\$17.5 bn:

- **US\$ 9.3 bn** (p.a. average) job creation & salaries
- **US\$ 2.8 bn** (p.a. average) community & economy
- **US\$ 5.4 bn** (p.a. average) taxes (corporate & indirect)

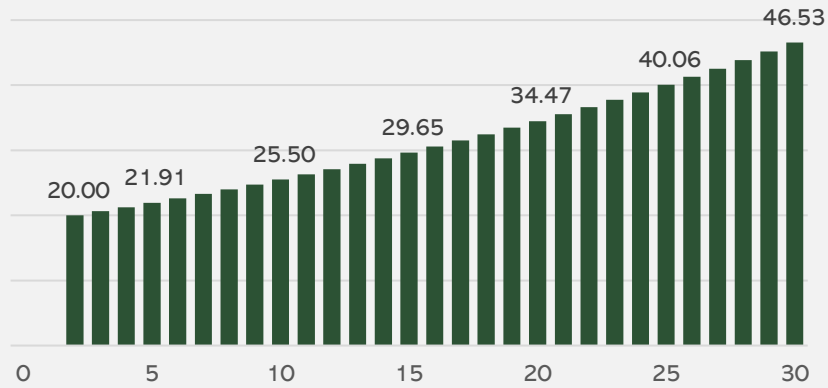


Financial Potential

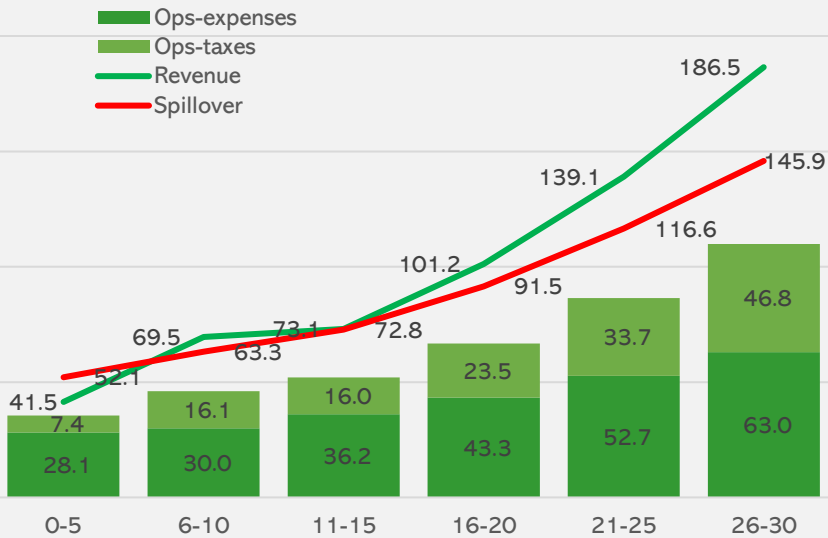


Financial Potential

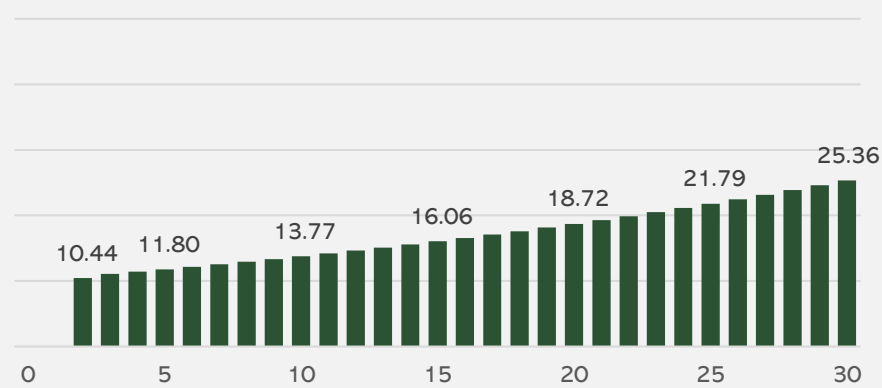
Article 6 – Pricing (US\$/ton)



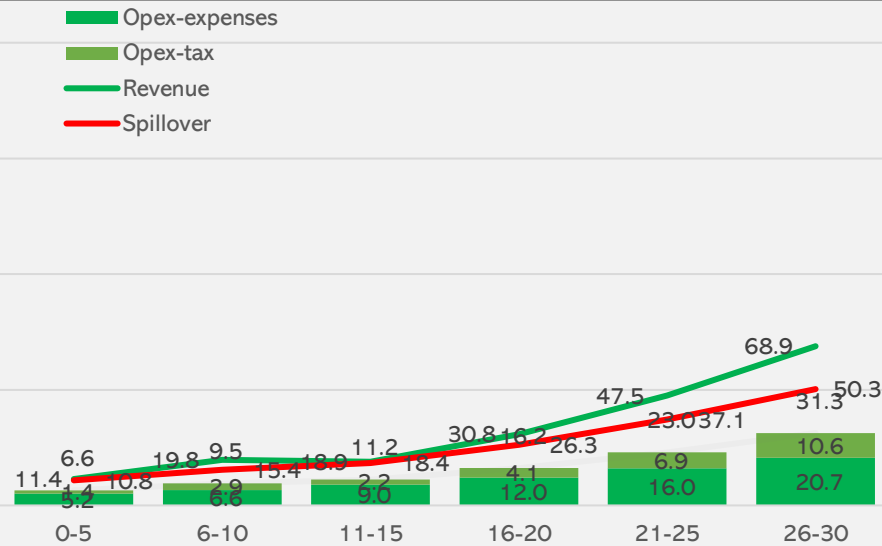
Article 6 – Financial Outcome (US\$'bn)



Non-Article 6 – Pricing (US\$/ton)



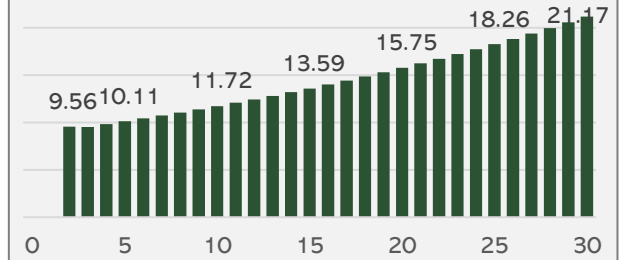
Non-Article 6 – Financial Outcome (US\$'bn)



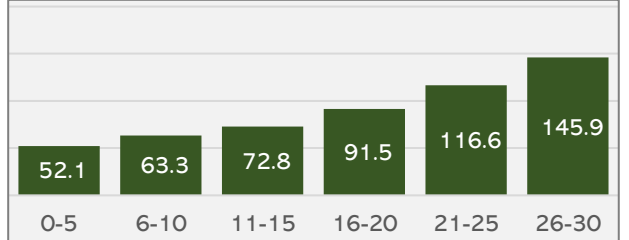
Non-Article 6 vs. Article 6

- Pricing: 45%-48% lower
- Economic effect: 20%-70% lower

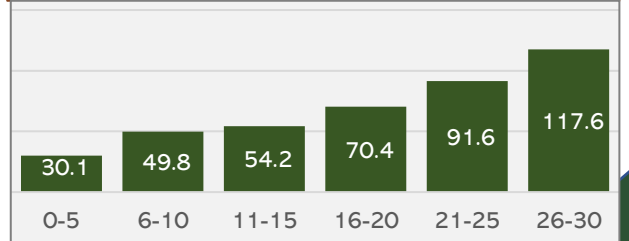
Difference: Pricing (US\$/ton)



Difference: Revenue (US\$'bn)



Difference: Economic Spillover (US\$'bn)



Assumptions – (1) Summary



• Set out below is summary of financial outcome simulation of Article 6 Revenue, Operating Cost, and Economic Spillover Effect (“Base Case”):

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Total area (ha)	51.2 ha	28.3	32.5	36.7	40.9	42.5	42.7	43.0	43.2	43.5	43.8	44.2	44.5	44.9	45.2	45.6	45.9	46.3	46.6	47.0	47.3	47.7	48.0	48.4	48.7	49.1	49.4	49.8	50.1	50.5	50.8	51.2	
VcUs	VcUs	-	-	547	432	497	534	551	567	584	604	627	645	663	681	699	717	735	753	771	789	807	825	843	861	879	897	915	933	951	969	987	1005
VcUs/ha	VcUs/ha	-	-	14.9	10.6	11.7	12.5	12.8	13.1	13.4	13.8	14.2	14.5	14.8	15.1	15.4	15.7	16.0	16.3	16.6	16.9	17.2	17.5	17.8	18.1	18.4	18.7	19.0	19.3	19.6	19.9	20.2	20.5
Revenue/ha	US\$/ha	-	-	293.5	214.5	245.2	269.9	285.1	301.0	317.4	335.9	356.6	316.8	292.9	313.6	335.1	357.4	380.6	404.7	429.6	455.6	482.5	510.4	539.4	569.4	600.6	633.0	666.5	701.3	737.4	774.8	813.6	
Net Cash Flow																																	
Revenue	US\$	-	-	10,775	8,772	10,413	11,530	12,252	13,007	13,797	14,717	15,749	14,103	13,143	14,181	15,270	16,412	17,609	18,864	20,179	21,556	22,999	24,509	26,089	27,742	29,472	31,280	33,172	35,149	37,215	39,373	41,629	
Salaries	US\$	(563)	(2,107)	(4,488)	(3,865)	(3,996)	(4,146)	(4,303)	(4,467)	(4,636)	(4,802)	(4,986)	(5,268)	(5,373)	(5,584)	(5,804)	(6,032)	(6,268)	(6,514)	(6,768)	(7,033)	(7,307)	(7,633)	(7,876)	(8,180)	(8,495)	(8,822)	(9,161)	(9,512)	(9,877)	(10,255)	(10,647)	
Community	US\$	-	(378)	(738)	(973)	(934)	(953)	(1,001)	(1,052)	(1,104)	(1,059)	(1,070)	(1,109)	(1,151)	(1,195)	(1,240)	(1,287)	(1,336)	(1,386)	(1,439)	(1,493)	(1,549)	(1,607)	(1,667)	(1,730)	(1,795)	(1,862)	(1,931)	(2,003)	(2,077)	(2,155)	(2,235)	
Opex	US\$	(893)	(2,423)	(892)	(253)	(263)	(283)	(294)	(305)	(314)	(325)	(628)	(350)	(364)	(378)	(392)	(407)	(423)	(439)	(456)	(473)	(910)	(510)	(529)	(549)	(570)	(592)	(614)	(637)	(661)	(686)		
Levy	US\$	-	-	(1,094)	(891)	(1,057)	(1,171)	(1,244)	(1,321)	(1,401)	(1,494)	(1,599)	(1,432)	(1,334)	(1,440)	(1,550)	(1,666)	(1,788)	(1,915)	(2,049)	(2,188)	(2,335)	(2,488)	(2,649)	(2,816)	(2,992)	(3,176)	(3,368)	(3,568)	(3,778)	(3,997)	(4,226)	
Iuran & Land Tax	US\$	-	(67)	(47)	(54)	(58)	(60)	(62)	(64)	(67)	(69)	(72)	(75)	(77)	(80)	(83)	(87)	(90)	(93)	(97)	(100)	(104)	(108)	(112)	(116)	(121)	(125)	(130)	(135)	(140)	(145)	(150)	
Taxation	US\$	-	-	(434)	(1,148)	(1,355)	(1,466)	(1,583)	(1,706)	(1,879)	(2,061)	(1,562)	(1,379)	(1,548)	(1,727)	(1,914)	(2,112)	(2,319)	(2,537)	(2,766)	(3,007)	(3,159)	(3,528)	(3,807)	(4,099)	(4,406)	(4,727)	(5,064)	(5,417)	(5,787)	(6,173)		
Net cash flow	US\$	(1,456)	(4,975)	3,517	2,302	2,956	3,573	3,892	4,228	4,580	5,100	5,637	4,031	3,478	3,970	4,488	5,034	5,609	6,214	6,850	7,520	8,223	8,604	9,747	10,563	11,421	12,320	13,263	14,252	15,288	16,374	17,511	
Economic impact																																	
Salaries	US\$	835	3,128	6,664	5,740	5,934	6,156	6,390	6,633	6,885	7,131	7,404	7,822	7,978	8,293	8,619	8,957	9,308	9,673	10,051	10,443	10,851	11,335	11,696	12,147	12,615	13,100	13,603	14,125	14,667	15,228	15,810	
Community	US\$	-	562	1,095	1,445	1,387	1,416	1,487	1,561	1,639	1,573	1,589	1,646	1,709	1,774	1,842	1,911	1,984	2,059	2,136	2,217	2,300	2,387	2,476	2,569	2,665	2,765	2,868	2,974	3,085	3,200	3,318	
Opex	US\$	1,327	3,599	1,325	376	391	405	420	436	453	466	483	932	520	540	561	582	605	628	652	677	703	1,351	757	786	816	847	879	912	946	982	1,019	
Levy	US\$	-	-	1,094	891	1,057	1,171	1,244	1,321	1,401	1,494	1,599	1,432	1,334	1,440	1,550	1,666	1,788	1,915	2,049	2,188	2,335	2,488	2,649	2,816	2,992	3,176	3,368	3,568	3,778	3,997	4,226	
Iuran & Land Tax	US\$	-	67	47	54	58	60	62	64	67	69	72	75	77	80	83	87	90	93	97	100	104	108	112	116	121	125	130	135	140	145	150	
Indirect tax	US\$	224	693	596	446	453	468	487	507	528	537	554	641	597	620	644	669	695	722	750	779	809	929	872	906	940	976	1,013	1,052	1,092	1,133	1,176	
Tax	US\$	-	-	-	434	1,148	1,355	1,466	1,583	1,706	1,879	2,061	1,562	1,379	1,548	1,727	1,914	2,112	2,319	2,537	2,766	3,007	3,159	3,528	3,807	4,099	4,406	4,727	5,064	5,417	5,787	6,173	
Total	US\$	2,386	8,048	10,822	9,386	10,429	11,030	11,557	12,106	12,678	13,150	13,761	14,110	13,595	14,295	15,026	15,787	16,581	17,409	18,273	19,172	20,110	21,757	22,090	23,147	24,248	25,394	26,588	27,831	29,125	30,472	31,874	

- The following pages Assumptions (2), (3) and (4) relates to the Base Case.
- For the purpose of this simulation, it extrapolates a 25,000ha projects due to: (i) capability of project development team to effectively manage a 25,000 ha size per each project block (ii) account for the split between fixed cost and variable cost of an average project, and (iii) this are applied to derive the cost in (3) Financial Drivers.
- The Economic Impact is assessed based on multiplier of 1.485x which is further explained in (4) Financial Output
- Set out below is a summary of the financial outcome of non-Article 6 case, adjusted for (i) Revenue, and (ii) Economic Spillover Effect:

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Total area (ha)	17.2 ha	3.8	5.2	6.5	7.9	8.5	8.8	9.0	9.3	9.5	9.9	10.2	10.6	10.9	11.3	11.6	12.0	12.3	12.7	13.0	13.4	13.7	14.1	14.4	14.8	15.1	15.5	15.8	16.2	16.5	16.9	17.2
VcUs	VcUs	-	-	322	223	240	256	273	289	306	326	349	267	215	238	261	284	307	330	353	376	399	422	446	469	492	515	538	561	584	607	630
VcUs/ha	VcUs/ha	-	-	49.2	28.2	28.1	29.1	30.1	31.1	32.0	32.9	34.1	25.2	19.6	21.0	22.4	23.7	24.9	26.0	27.1	28.1	29.1	30.0	30.8	31.7	32.5	33.2	33.9	34.6	35.3	35.9	36.5
Revenue/ha	US\$/ha	-	-	506.2	307.9	316.1	338.6	361.4	384.7	408.5	433.4	462.3	352.4	283.0	313.2	343.7	374.5	405.7	437.4	469.6	502.3	535.6	569.7	604.4	639.8	676.1	713.2	751.2	790.1	830.0	870.9	912.9
Net Cash Flow																																
Revenue	US\$	-	-	3,309	2,438	2,701	2,978	3,270	3,577	3,900	4,289	4,737	3,734	3,098	3,538	4,003	4,493	5,009	5,553	6,126	6,729	7,363	8,030	8,731	9,467	10,240	11,052	11,904	12,797	13,734	14,716	15,745
Salaries	US\$	(75)	(334)	(799)	(748)	(804)	(854)	(906)	(961)	(1,018)	(1,085)	(1,157)	(1,254)	(1,311)	(1,395)	(1,483)	(1,576)	(1,673)	(1,774)	(1,880)	(1,991)	(2,107)	(2,241)	(2,352)	(2,484)	(2,622)	(2,766)	(2,917)	(3,074)	(3,238)	(3,410)	(3,589)
Community	US\$	-	(60)	(131)	(188)	(188)	(196)	(211)	(226)	(242)	(239)	(248)	(264)	(281)	(298)	(317)	(336)	(356)	(378)	(400)	(423)	(447)	(472)	(498)	(525)	(554)	(584)	(615)	(647)	(681)	(716)	(753)
Opex	US\$	(119)	(384)	(159)	(49)	(53)	(56)	(60)	(63)	(67)	(71)	(75)	(149)	(85)	(91)	(97)	(102)	(109)	(115)	(122)	(129)	(137)	(144)	(152)	(161)	(170)	(179)	(188)	(198)	(209)	(220)	(231)
Levy	US\$	-	-	(336)	(248)	(274)	(302)	(332)	(363)	(396)	(435)	(481)	(379)	(314)	(359)	(406)	(456)	(509)	(564)	(622)	(683)	(748)	(815)	(886)	(961)	(1,040)	(1,122)	(1,208)	(1,299)	(1,394)	(1,494)	(1,598)
Iuran & Land Tax	US\$	-	(11)	(8)	(10)	(12)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(23)	(24)	(25)	(27)	(28)	(30)	(32)	(33)	(35)	(37)	(39)	(41)	(44)	(46)	(48)	(51)
Taxation	US\$	-	-	(275)	(320)	(364)	(412)	(461)	(512)	(566)	(637)	(717)	(815)	(921)	(1,048)	(1,187)	(1,338)	(1,501)	(1,676)	(1,863)	(2,063)	(2,276)	(2,503)	(2,744)	(3,000)	(3,271)	(3,557)	(3,858)	(4,174)	(4,506)	(4,854)	
Net cash flow	US\$	(194)	(789)	1,601	875	1,006	1,146	1,288	1,438	1,596	1,807	2,043	1,215	775	989	1,215	1,454	1,707	1,974	2,256	2,554	2,867	3,092	3,548	3,915	4,301	4,707	5,133	5,582	6,052	6,546	7,065
Economic impact																																
Salaries	US\$	111	496	1,187	1,111	1,194	1,268	1,345	1,427	1,512	1,611	1,718	1,862	1,947	2,072	2,203	2,340	2,484	2,634	2,792	2,957	3,129	3,327	3,493	3,689	3,894	4,108	4,331	4,565	4,809	5,063	5,329
Community	US\$	-	89	195	280	279	292	313	336	360	355	369	392	417	443	471	499	529	561	593	628	663	701	74								

Assumptions – (2) VCU Production



Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Land Area		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Ramp-up	15% % growth	50%	65%	80%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Carbon Type																																	
APDD	7.5 m/ha	3.77	4.91	6.04	7.17	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	
LtPF	13.5 m/ha	6.75	8.77	10.79	12.82	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	
ARR	5.2 m/ha	2.61	3.40	4.18	4.96	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	
AUDD	15.2 m/ha	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	
CIW / RWE	7.5 m/ha	-	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.35	2.70	3.05	3.40	3.75	4.10	4.45	4.80	5.15	5.50	5.85	6.20	6.55	6.90	7.25	7.60	7.95	8.30	8.65	9.00	9.35	9.70	
Total Area	49.0 m/ha	28.3	32.5	36.7	40.9	42.5	42.7	43.0	43.2	43.5	43.8	44.2	44.5	44.9	45.2	45.6	45.9	46.3	46.6	47.0	47.3	47.7	48.0	48.4	48.7	49.1	49.4	49.8	50.1	50.5	50.8	51.2	
Verified Carbon Units		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Claim Assumptions																																	
APDD	10 Years	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LtPF	30 Years	20%	40%	60%	80%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
ARR	30 Years	33%	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
AUDD	30 Years	20%	40%	60%	80%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
CIW / RWE	30 Years	0%	3%	5%	8%	10%	13%	15%	18%	21%	24%	28%	31%	35%	39%	42%	46%	49%	53%	57%	60%	64%	68%	71%	75%	78%	82%	86%	89%	93%	96%	100%	
Emission Reduction																																	
APDD	201 mt.CO2e	201	201	201	201	201	201	201	201	201	201	201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LtPF	135 mt.CO2e	27	54	81	108	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	
ARR	37 mt.CO2e	12	25	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	
AUDD	137 mt.CO2e	27	55	82	109	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	
CIW / RWE	711 mt.CO2e	-	18	37	55	73	92	110	128	147	172	198	224	249	275	301	326	352	377	403	429	454	480	506	531	557	583	608	634	660	685	711	
Gross VCU	1,221 mt.CO2e	267	353	438	510	583	601	620	638	656	682	708	732	758	784	809	835	861	886	912	938	964	990	1016	1042	1068	1094	1120	1146	1172	1198	1224	
Gross VCU/ha		5	7	9	10	12	12	13	13	13	14	14	11	11	12	12	13	13	14	15	15	16	16	17	17	18	18	19	19	20	20	21	
Risk Buffer	10% (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Net VCU		241	317	394	459	525	541	558	574	591	614	637	479	502	525	548	572	595	618	641	664	687	710	733	756	779	802	826	849	872	895	918	
Net VCU/ha		5	6	8	9	11	11	11	12	12	13	13	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	
VCU - Inventory		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
(+) Balance (start)		-	-	317	164	191	219	225	232	239	246	256	265	200	209	219	229	238	248	257	267	277	286	296	305	315	325	334	344	354	363	373	
(+) Claimed		-	317	394	459	525	541	558	574	591	614	637	479	502	525	548	572	595	618	641	664	687	710	733	756	779	802	826	849	872	895	918	
(-) Sold	1.6 initial sale	-	-	(547)	(432)	(497)	(534)	(551)	(567)	(584)	(604)	(627)	(545)	(493)	(516)	(539)	(562)	(585)	(608)	(631)	(654)	(677)	(700)	(724)	(747)	(770)	(793)	(816)	(839)	(862)	(885)	(908)	
(=) Balance (end)		-	317	164	191	219	225	232	239	246	256	265	200	209	219	229	238	248	257	267	277	286	296	305	315	325	334	344	354	363	373	382	

• Set out below are the assumptions underpinning the VCU Production assumptions above:

Land area:

- Ramp-up: Land area managed to ramp-up from 50% at initial year, growing 15% year-on-year until it reaches 100% by year 4
- Land Area: Please refer to next slide

Verified Carbon Units:

- (i) Emission reduction & claim patterns (percentage) – please refer to next slide
- Risk buffer: We applied 10% risk buffer (a reduction to the Gross VCUs claimed)

Assumptions – (2) VCU Production

(A) Potential Carbon Credits

(A) Summary of potential carbon credits

Type	Area (ha)	Per Year (t.CO2e)	Area (m ² /ha)	Per Year (m ² .t.CO2e)	Production (years)	Assumptions (Remarks)
APDD	7,546,763	200,743,896	7.5	201	10	flat across 10 years
LtPF	13,492,935	134,929,350	13.5	135	30	grow 20% each year until 100% in year 5 (up to year 30)
ARR	5,226,223	37,106,183	5.2	37	30	33% in year 1, 67% in year 2, 100% year 3-20
AUDD	15,202,521	136,822,685	15.2	137	30	grow 20% each year until 100% in year 5 (up to year 30)
CIW / RWE	9,700,000	711,010,000	9.7	711	30	grow 0.25m ha/p.a. Year 1-8, 0.35m ha/p.a. thereafter
Total	51,168,442	1,220,612,115	51.2	1,221		

(A)(ii) Volume of carbon credits by type

Types	Volume
APDD	Source: FREL 2022
- primary	4.5 t CO2e /ha /yr (primary forest - 8%)
- secondary	2.5 t CO2e /ha /yr (secondary forest - 92%)
LtPF	10 t CO2e /ha /yr
ARR	7.1 t CO2e /ha /yr
AUDD	[source: FREL 2022]
- primary	45 t CO2e /ha (primary forest - 57%)
- secondary	25 t CO2e /ha (secondary forest - 43%)
CIW / RWE	73.3 t O2e /ha /yr (continue until peatland is depleted)

(A)(i) Assumptions

Types	ha			Distribution (%)		VCU /ha /year		VCU /year			
	Primary	Secondary	General	Primary	Secondary	Primary	Secondary	Primary	Secondary	General	Total
APDD	603,741	6,943,022	-	8%	92%	45.0	25.0	27,168,347	173,575,549	-	200,743,896
LtPF	-	-	13,492,935	-	100%	-	10.0	-	-	134,929,350	134,929,350
ARR	-	-	5,226,223	-	100%	-	7.1	-	-	37,106,183	37,106,183
AUDD	8,665,437	6,537,084	-	57%	43%	9.0	9.0	77,988,931	58,833,755	-	136,822,685
CIW / RWE	-	-	9,700,000	-	100%	-	73.3	-	-	711,010,000	711,010,000
Total	9,269,178	13,480,106	28,419,158					105,157,277	232,409,304	883,045,533	1,220,612,115

(A)(iii) Abbreviation

APDD	Avoided Planned Deforestation and/or Degradation ("APDD")
LtPF	Logged to Protected Forest ("LtPF")
ARR	Afforestation, Reforestation and Revegetation ("ARR")
AUDD	Avoided Unplanned Deforestation and/or Degradation ("AUDD")
CIW / RWE	Conservation of Intact Wetland ("CIW") / Reforestation of Wetland Ecosystems ("RWE")

(B) Data

(B)(i) Existing Concession on Forest Land with potential for APDD and LtPF opportunities (in ha)

(ha)	Existing Concession on Forest Land with potential for APDD and LtPF opportunities			Activities on mineral soils			Activities on peatland soils		
	APDD	LtPF	ARR	APDD	LtPF	ARR	APDD	LtPF	ARR
Kalimantan	3,239,380	10,543,665	2,930,889	472,395	350,891	2,765,472	2,766,985	10,192,774	165,417
Maluku	93,586	1,313,012	126,959	-	-	126,959	93,586	1,313,012	-
Nusa Tenggara	85,835	36,618	46,902	-	-	46,902	85,835	36,618	-
Papua	863,883	113,837	132,345	66,477	4,697	117,346	797,406	109,141	14,999
Sulawesi	194,879	374,912	155,972	-	-	155,972	194,879	374,912	-
Sumatera	3,069,201	1,110,890	1,833,157	1,527,173	196,142	1,388,138	1,542,028	914,748	445,018
Total	7,546,763	13,492,935	5,226,223	2,066,045	551,730	4,600,789	5,480,719	12,941,206	625,434

(B)(ii) Forested land not concessions and potentially eligible for AUDD

Zone	AUDD	Adjustment*	AUDD
Kalimantan	16,110,171	20%	3,222,034
Maluku	4,197,885	20%	839,577
Nusa Tenggara	1,862,853	20%	372,571
Papua	34,236,851	20%	6,847,370
Sulawesi	8,753,670	20%	1,750,734
Sumatera	10,851,163	20%	2,170,233
Total	76,012,595	20%	15,202,521

* Refer to Note (ii) in Other Assumptions for explanation on Adjustment

(B)(iii) Existing concession on Forest Land with potential for peatland conservation and restoration opportunities are listed below

Zone	CIW / RWE
Kalimantan	576,246
Papua	81,417
Sumatera	1,916,067
Total	2,573,730

Others assumptions:

- (i) **CIW/RWE**
grows 250,000ha/yr from Year 1-8, 350,000ha/yr thereafter
Whilst area of usable peatland is 22.5m ha, there are limitations to the amount of peatland that can be properly conserved in 30 year period.
- (ii) **AUDD**
Whilst AUDD land area is 76m ha, only 20% of the AUDD land is used in the forecast as its only nested jurisdictional projects that will credibly be able to claim. Therefore, only 15.2ha is applicable (i.e. 20% of 76m ha)
an adequate deforestation rate to fund the conservation activities
We estimate the deforestation rate to be 2% p.a. of the 450m VCU, which translate into 9.0 VCU /ha /yr

A Due to low VCU /ha /year of the LtPF, ARR and AUDD land area, low carbon prices would render these 34m ha non-economically viable as cost per VCU approximates or exceeds the revenue it generates

Assumptions – (3) Financial Drivers



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Sales																																
VCU sold	-	-	547	432	497	534	551	567	584	604	627	545	493	516	539	562	585	608	631	654	677	700	724	747	770	793	816	839	862	885	908	
\$ Price - Avg	-	-	20.00	20.62	21.25	21.91	22.59	23.28	24.00	24.74	25.50	26.28	27.08	27.92	28.77	29.65	30.56	31.49	32.46	33.45	34.47	35.52	36.61	37.72	38.87	40.06	41.28	42.53	43.83	45.16	46.53	
Revenue (Gross)	-	-	10,939	8,906	10,571	11,705	12,438	13,205	14,008	14,941	15,989	14,317	13,343	14,397	15,502	16,662	17,877	19,151	20,486	21,885	23,349	24,882	26,486	28,165	29,920	31,757	33,677	35,684	37,781	39,973	42,263	
Commission 1.50%	-	-	(164)	(134)	(159)	(176)	(187)	(198)	(210)	(224)	(240)	(215)	(200)	(216)	(233)	(250)	(268)	(287)	(307)	(328)	(350)	(373)	(397)	(422)	(449)	(476)	(505)	(535)	(567)	(600)	(634)	
Revenue (net)	-	-	10,775	8,772	10,413	11,530	12,252	13,007	13,797	14,717	15,749	14,103	13,143	14,181	15,270	16,412	17,609	18,864	20,179	21,556	22,999	24,509	26,089	27,742	29,472	31,280	33,172	35,149	37,215	39,373	41,629	
Cost																																
Operating Cost per ha																																
Salaries	(20)	(65)	(122)	(94)	(94)	(97)	(100)	(103)	(107)	(110)	(113)	(118)	(120)	(123)	(127)	(131)	(135)	(140)	(144)	(149)	(153)	(159)	(163)	(168)	(173)	(179)	(184)	(190)	(196)	(202)	(208)	
Community	-	(12)	(20)	(24)	(22)	(22)	(23)	(24)	(25)	(24)	(24)	(25)	(26)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(32)	(33)	(34)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(44)	
Opex	(32)	(75)	(24)	(6)	(6)	(6)	(7)	(7)	(7)	(7)	(14)	(8)	(8)	(8)	(9)	(9)	(9)	(9)	(10)	(10)	(19)	(8)	(11)	(11)	(11)	(12)	(12)	(12)	(13)	(13)		
Iuran & Land Tax	-	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(3)	(3)	(3)	(3)	(3)		
Operating Cost	(563)	(2,107)	(4,488)	(3,865)	(3,996)	(4,146)	(4,303)	(4,467)	(4,636)	(4,802)	(4,986)	(5,268)	(5,373)	(5,584)	(5,804)	(6,032)	(6,268)	(6,514)	(6,768)	(7,033)	(7,307)	(7,633)	(7,876)	(8,180)	(8,495)	(8,822)	(9,161)	(9,512)	(9,877)	(10,255)	(10,647)	
Salaries	-	(378)	(738)	(973)	(934)	(953)	(1,001)	(1,052)	(1,104)	(1,059)	(1,070)	(1,109)	(1,151)	(1,195)	(1,240)	(1,287)	(1,336)	(1,386)	(1,439)	(1,493)	(1,549)	(1,607)	(1,667)	(1,730)	(1,795)	(1,862)	(1,931)	(2,003)	(2,077)	(2,155)	(2,235)	
Community	(893)	(2,423)	(892)	(253)	(263)	(272)	(283)	(294)	(305)	(314)	(325)	(628)	(350)	(364)	(378)	(392)	(407)	(423)	(439)	(456)	(473)	(910)	(510)	(529)	(549)	(570)	(592)	(614)	(637)	(661)	(686)	
Opex	-	-	(1,094)	(891)	(1,057)	(1,171)	(1,244)	(1,321)	(1,401)	(1,494)	(1,599)	(1,432)	(1,334)	(1,440)	(1,550)	(1,666)	(1,788)	(1,915)	(2,049)	(2,188)	(2,335)	(2,488)	(2,649)	(2,816)	(2,992)	(3,176)	(3,368)	(3,568)	(3,778)	(3,997)	(4,226)	
Levy 10%	-	(67)	(47)	(54)	(58)	(60)	(62)	(64)	(67)	(69)	(72)	(75)	(77)	(80)	(83)	(87)	(90)	(93)	(97)	(100)	(104)	(108)	(112)	(116)	(121)	(125)	(130)	(135)	(140)	(145)	(150)	
Iuran & Land Tax	(1,456)	(4,975)	(7,258)	(6,036)	(6,308)	(6,602)	(6,893)	(7,197)	(7,512)	(7,738)	(8,051)	(8,510)	(8,285)	(8,663)	(9,055)	(9,464)	(9,889)	(10,331)	(10,792)	(11,270)	(11,768)	(12,746)	(12,814)	(13,372)	(13,952)	(14,554)	(15,181)	(15,832)	(16,509)	(17,213)	(17,944)	
Operating Cost	(28)	(97)	(142)	(118)	(123)	(129)	(135)	(141)	(147)	(151)	(157)	(166)	(162)	(169)	(177)	(185)	(193)	(202)	(211)	(220)	(230)	(249)	(250)	(261)	(273)	(284)	(297)	(309)	(323)	(336)	(351)	
Operating Cost/ha	-	-	10	8	10	11	11	12	13	13	14	13	12	13	14	15	16	17	18	20	21	22	24	25	27	28	30	32	34	36	38	
Tax payable																																
Tax asset (tax losses)																																
(+) Balance (start)	-	1,456	6,364	1,706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(+) Addition	1,456	4,908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(-) Utilisation	-	-	(4,658)	(1,706)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(-) Balance (end)	1,456	6,364	1,706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Taxable Profit																																
(+) Current Year	-	-	4,658	3,681	5,219	6,158	6,664	7,195	7,752	8,542	9,369	7,099	6,269	7,038	7,848	8,701	9,598	10,541	11,533	12,575	13,669	14,359	16,035	17,303	18,633	20,027	21,488	23,019	24,623	26,303	28,061	
(-) PY tax loss utilised	-	-	(4,658)	(1,706)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(-) Taxable profit	-	-	-	1,975	5,219	6,158	6,664	7,195	7,752	8,542	9,369	7,099	6,269	7,038	7,848	8,701	9,598	10,541	11,533	12,575	13,669	14,359	16,035	17,303	18,633	20,027	21,488	23,019	24,623	26,303	28,061	
(X) Tax Rate 22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	
(-) Tax payable	-	-	-	434	1,148	1,355	1,466	1,583	1,706	1,879	2,061	1,562	1,379	1,548	1,727	1,914	2,112	2,319	2,537	2,766	3,007	3,159	3,528	3,807	4,099	4,406	4,727	5,064	5,417	5,787	6,173	

• Set out below are the assumptions underpinning the Financial Drivers:

- Average Prices: is based upon a combination of selling price and volume of carbon credit sales.
- Salaries, Community and Opex: is based on the cost per hectare of the simulation of 25,000ha carbon development project
- Levy of 10% is applied on net sales
- Iuran and land tax is extrapolated based on applicable rates payables of simulated 25,000ha project
- Tax payable: assumes 22% Indonesia Corporate Tax rate

Assumptions – (4) Financial Output



Cash Flow	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Net Cash Flow (US\$)																																	
(+) Revenue (net)	-	-	10,775	8,772	10,413	11,530	12,252	13,007	13,797	14,717	15,749	14,103	13,143	14,181	15,270	16,412	17,609	18,864	20,179	21,556	22,999	24,509	26,089	27,742	29,472	31,280	33,172	35,149	37,215	39,373	41,629		
(-) Salaries	(563)	(2,107)	(4,488)	(3,865)	(3,996)	(4,146)	(4,303)	(4,467)	(4,636)	(4,802)	(4,986)	(5,268)	(5,373)	(5,584)	(5,804)	(6,032)	(6,268)	(6,514)	(6,768)	(7,033)	(7,307)	(7,633)	(7,876)	(8,180)	(8,495)	(8,822)	(9,161)	(9,512)	(9,877)	(10,255)	(10,647)		
(-) Community	-	(378)	(738)	(973)	(934)	(953)	(1,001)	(1,052)	(1,104)	(1,059)	(1,070)	(1,109)	(1,151)	(1,195)	(1,240)	(1,287)	(1,336)	(1,386)	(1,439)	(1,493)	(1,549)	(1,607)	(1,667)	(1,730)	(1,795)	(1,862)	(1,931)	(2,003)	(2,077)	(2,155)	(2,235)		
(-) Opex	(893)	(2,423)	(892)	(253)	(263)	(272)	(283)	(294)	(305)	(314)	(325)	(628)	(350)	(364)	(378)	(392)	(407)	(423)	(439)	(456)	(473)	(910)	(510)	(529)	(549)	(570)	(592)	(614)	(637)	(661)	(686)		
(-) Levy	-	-	(1,094)	(891)	(1,057)	(1,171)	(1,244)	(1,321)	(1,401)	(1,494)	(1,599)	(1,432)	(1,334)	(1,440)	(1,550)	(1,666)	(1,788)	(1,915)	(2,049)	(2,188)	(2,335)	(2,488)	(2,649)	(2,816)	(2,992)	(3,176)	(3,368)	(3,568)	(3,778)	(3,997)	(4,226)		
(-) Iuran & Land Tax	-	(67)	(47)	(54)	(58)	(60)	(62)	(64)	(67)	(69)	(72)	(75)	(77)	(80)	(83)	(87)	(90)	(93)	(97)	(100)	(104)	(108)	(112)	(116)	(121)	(125)	(130)	(135)	(140)	(145)	(150)		
(-) Tax	-	-	-	(434)	(1,148)	(1,355)	(1,466)	(1,583)	(1,706)	(1,879)	(2,061)	(1,562)	(1,379)	(1,548)	(1,727)	(1,914)	(2,112)	(2,319)	(2,537)	(2,766)	(3,007)	(3,159)	(3,528)	(3,807)	(4,099)	(4,406)	(4,727)	(5,064)	(5,417)	(5,787)	(6,173)		
(=) Net cash flow	(1,456)	(4,975)	3,517	2,302	2,956	3,573	3,892	4,228	4,580	5,100	5,637	4,031	3,478	3,970	4,488	5,034	5,609	6,214	6,850	7,520	8,223	8,604	9,747	10,563	11,421	12,320	13,263	14,252	15,288	16,374	17,511		
Economic Impact	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Economic multiplier																																	
Multiplier effect	1.485 x	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485	1.485		
Economic effect																																	
Salaries	835	3,128	6,664	5,740	5,934	6,156	6,390	6,633	6,885	7,131	7,404	7,822	7,978	8,293	8,619	8,957	9,308	9,673	10,051	10,443	10,851	11,335	11,696	12,147	12,615	13,100	13,603	14,125	14,667	15,228	15,810		
Community	-	562	1,095	1,445	1,387	1,416	1,487	1,561	1,639	1,573	1,589	1,646	1,709	1,774	1,842	1,911	1,984	2,059	2,136	2,217	2,300	2,387	2,476	2,569	2,665	2,765	2,868	2,974	3,085	3,200	3,318		
Opex	1,327	3,599	1,325	376	391	405	420	436	453	466	483	932	520	540	561	582	605	628	652	677	703	1,351	757	786	816	847	879	912	946	982	1,019		
Levy	-	-	1,094	891	1,057	1,171	1,244	1,321	1,401	1,494	1,599	1,432	1,334	1,440	1,550	1,666	1,788	1,915	2,049	2,188	2,335	2,488	2,649	2,816	2,992	3,176	3,368	3,568	3,778	3,997	4,226		
Iuran & Land Tax	-	67	47	54	58	60	62	64	67	69	72	75	77	80	83	87	90	93	97	100	104	108	112	116	121	125	130	135	140	145	150		
Indirect tax	11%	224	693	596	446	453	468	487	507	528	537	554	641	597	620	644	669	695	722	750	779	809	872	906	940	976	1,013	1,052	1,092	1,133	1,176		
Tax	-	-	-	434	1,148	1,355	1,466	1,583	1,706	1,879	2,061	1,562	1,379	1,548	1,727	1,914	2,112	2,319	2,537	2,766	3,007	3,159	3,528	3,807	4,099	4,406	4,727	5,064	5,417	5,787	6,173		
Total	2,386	8,048	10,822	9,386	10,429	11,030	11,557	12,106	12,678	13,150	13,761	14,110	13,595	14,295	15,026	15,787	16,581	17,409	18,273	19,172	20,110	21,757	22,090	23,147	24,248	25,394	26,588	27,831	29,125	30,472	31,874		
Economic effect (detailed)																																	
[Salaries] - Salaries	100% alloc.	835	3,128	6,664	5,740	5,934	6,156	6,390	6,633	6,885	7,131	7,404	7,822	7,978	8,293	8,619	8,957	9,308	9,673	10,051	10,443	10,851	11,335	11,696	12,147	12,615	13,100	13,603	14,125	14,667	15,228	15,810	
[Comm.Dev.] - Salaries	60% alloc.	-	337	657	867	832	850	892	937	984	944	953	988	1,026	1,065	1,105	1,147	1,190	1,235	1,282	1,330	1,380	1,432	1,486	1,541	1,599	1,659	1,721	1,785	1,851	1,920	1,991	
[Comm.Dev.] - Expenses	40% alloc.	-	225	438	578	555	566	595	625	656	629	636	659	684	710	737	765	793	823	855	887	920	955	990	1,028	1,066	1,106	1,147	1,190	1,234	1,280	1,327	
[Opex] - Expenses	75% alloc.	995	2,699	994	282	293	303	315	327	340	350	362	699	390	405	421	437	454	471	489	508	527	1,013	568	590	612	635	659	684	710	737	764	
[Opex] - Profit	25% alloc.	332	900	331	94	98	101	105	109	113	117	121	233	130	135	140	146	151	157	163	169	176	338	189	197	204	212	220	228	237	246	255	
Recap																																	
Salaries		835	3,465	7,321	6,607	6,767	7,006	7,282	7,570	7,868	8,075	8,357	8,810	9,004	9,357	9,724	10,104	10,499	10,908	11,333	11,774	12,231	12,767	13,182	13,689	14,214	14,759	15,324	15,910	16,518	17,148	17,801	
Expenses		995	2,924	1,432	860	848	870	910	952	996	979	997	1,358	1,074	1,115	1,157	1,201	1,247	1,295	1,344	1,395	1,447	1,968	1,558	1,617	1,678	1,741	1,806	1,874	1,944	2,016	2,092	
Profit		332	900	331	94	98	101	105	109	113	117	121	233	130	135	140	146	151	157	163	169	176	338	189	197	204	212	220	228	237	246	255	
Indirect Tax																																	
Salaries (Income Tax)	5% Inc.Tax	42	173	366	330	338	350	364	378	393	404	418	441	450	468	486	505	525	545	567	589	612	638	659	684	711	738	766	796	826	857	890	
Expenses (VAT)	11% VAT	109	322	157	95	93	96	100	105	110	108	110	149	118	123	127	132	137	142	148	153	159	216	171	178	185	192	199	206	214	222	230	
Profit (Corporate Tax)	22% Corp.Tax	73	198	73	21	22	23	24	25	26	27	51	29	30	31	32	33	35	36	37	39	74	42	43	45	47	48	50	52	54	56		
Indirect Tax		224	693	596	446	453	468	487	507	528	537	554	641	597	620	644	669	695	722	750	779	809	872	906	940	976	1,013	1,052	1,092	1,133	1,176		
Effective tax revenue (%)		10%	10%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%		

- Set out below are the assumptions underpinning the Financial Drivers:
 - ❑ **Economic Multiplier:** based on ADB's assumption of spending multiplier which average to be 1.485x
 - ❑ **Indirect tax:**
 - (i) Community Development, and (ii) Opex, were re-analysed into (i) Salaries, (ii) Expenses, and (iii) MSME Profits
 - Please see assumptions set out at the right-bottom of this page

Indirect tax (from Economic Spillover Effect)

- (i) Salaries – Income tax 5% applied (assuming salaries in rural area in tax bracket <IDR50mn p.a.
- (ii) Expenses – VAT of 11% applied
- (iii) MSME Profits – 22% corporate tax rate applied

Therefore, estimated average indirect tax income (from economic spillover effect) is estimated to range 6%-10%.