

## Financial Strategy and Projection for Recycled Paper Hub Business Project

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### Abstract

*Recycled Paper Hub is a business unit mainly focus in processing recycled paper sorted from local collector who also act as supplier such as waste paper collected from traditional market, ex-packaging collected from home industry and household waste, etc. Recycled Paper Hub primary goal is to participate in the sustainable business by contributing to the economy of the surrounding community along with a commitment to maintaining a green environment. In order to achieve this goals, Recycled Paper Hub conduct business development strategy which include financial planning and projection. The method used in this research is using data that has been previously collected and analyzed within 3 stages, namely : data collection (internaly from company that the author is working, then data filtering, and finally data presentation along with conclusion. Within this research, financial planning is distributed in 5 main pillars, that is : Financial Objectives, ,Financial Elements, Financial Projections, Feasibility Analysis, and Performance Analysis.*

**Keyword:** *Financial Strategy; Business Development; Recycled Paper*

## INTRODUCTION

The pulp and paper industry in Indonesia is crucial, impacting various facets of daily life from household needs to industrial uses (Manihuruk et al., 2021; Muna et al., 2023). With vast forest resources, Indonesia has the potential to be a global leader in this sector (Agitha et al., 2023; Reiter & Stehrer, 2023). Despite a contraction in 2021, Indonesia ranks 6th in paper and 9th in pulp production worldwide, contributing significantly to GDP and foreign exchange earnings, and providing extensive employment (Aitken, 2019; van den Bergh, 2022). The low per capita paper consumption compared to developed countries highlights substantial growth potential. Key exports to the European Union, the United States, and China underline Indonesia's strong market presence (Newell et al., 2021; Tønnessen, 2023).

The industry's growth in 2022, supported by the Ministry of Industry, showcases its resilience and capacity for recovery (Rahman et al., 2024; Tsujimura, 2020). Challenges such as environmental concerns, regulatory issues on raw material imports, competition from imported paper, and high production costs persist (Kleiner et al., 2021; Pallivalappil & S. N., 2021). However, the increasing demand for recycled paper products offers promising growth opportunities. According to a report by DataIndonesia.id, the GDP from the paper and paper products industry increased by 3.73% in 2022, reflecting the sector's positive trajectory . With robust government support, advanced technology, and vast market potential, Indonesia's pulp and paper industry is well-positioned for a prosperous future, presenting compelling investment opportunities and contributing to sustainable economic development.

For a new company like Recycled Paper Hub, a sound financial strategy is essential to capitalize on these opportunities. Securing funding through a mix of equity investment and government grants aimed at green initiatives can provide the necessary capital for advanced recycling technologies (Brough & Jouhara, 2020; Damayanti et al., 2021; Rybicka et al., 2016). Establishing strategic partnerships with key stakeholders in the supply chain, including waste management companies and packaging

manufacturers, will ensure a steady supply of raw materials. Additionally, leveraging competitive interest rates for loans dedicated to green businesses can reduce financing costs. By focusing on these financial strategies, Recycled Paper Hub can effectively navigate industry challenges, capitalize on emerging opportunities, and establish itself as a leader in Indonesia’s burgeoning recycled paper market.

**METHODS**

The research methodology applied in this study is quantitative research (Sugiyono, 2022). The data sources and collection methods fundamental to this study consist of two types: primary data and secondary data. Primary data are acquired through projection calculations and discussions with the business proposal preparation team. Secondary data are sourced from company documents and benchmark data from similar enterprises. The data analysis approach employed in this study encompasses two principal aspects evaluation of investment feasibility using indicators such as ROI, NPV, IRR, and Payback Period. And financial ratio analysis, including liquidity, solvability, activity, and profitability metrics. Investment feasibility analysis is objective of the investment feasibility evaluation is to determine the viability of the proposed investment. This assessment is conducted using several methods, namely ROI, NPV, IRR, and Payback Period. Therefore, strategy implemented by PT Recycled Paper Hub is Differentiation.

The following are the financial goals and objectives of PT Recycled Paper Hub :

**Table 1.** Financial Goals and Objectives.

	<b>Goals</b>	<b>Objectives</b>
Short Term (Y1-Y2)	Obtained and managed initial Working Capital of Rp. 8,000,000,000 Achieve positive cashflow growth and financial ratios Maintain other non-operating costs below 10% of total annual costs.	Collaborate with investors and banks to fulfill capital needs. Efficient distribution of working capital according to the share of operating costs required. Evaluate the performance of financial statements and expenses every month.
Mid Term (Y3-Y5)	Achieve profit growth above 7.5% and Gross Profit Margin above 10% per year. Maintain and control the turnover of money in and out of the company optimally	Evaluate the performance of financial statements and components that affect profit with management every month. Evaluate financial transactions (income and expenses) once a week.
Long Term (>Y5)	Maintain profit growth above 10% and Gross Profit Margin above 15% per year. Create comprehensive and integrated financial programs and tools	Evaluate the performance of financial statements and components that affect profit with management every 2 weeks. Collaborate with 3rd parties (financial consultants and service providers of financial tools integration programs (SAP ERP, Oracle, etc.).

**RESULT and DISCUSSION**

**Financial Planning Elements**

The elements of financial planning stem from the three primary functions of company activities is marketing, operations, and human resources, along with risk management (Sreenivasan & Suresh, 2023; Zainal Abidin et al., 2023). Each of these functions incurs costs necessary for business operations (Essalh, 2024; “Psychological Foundation of Financial Planning,” 2023). These costs are aggregated within each function and subsequently factored into the company’s financial planning and accounting. This comprehensive financial information is then utilized by management to make informed decisions regarding the company’s strategic direction.

**Table 2.** Revenue Planning

<b>Year</b>	<b>Y-1</b>	<b>Y-2</b>	<b>Y-3</b>	<b>Y-4</b>	<b>Y-5</b>
<b>Production Volume</b>	13,800	13,800	17,280	17,280	27,600
<b>Sales Volume</b>	12,420	13,110	17,280	18,108	28,842



<b>Price / KG</b>	IDR	IDR	IDR	IDR	IDR
	3,650	3,650	3,650	3,650	3,650
<b>Revenue Estimation</b>	IDR 45,333 Mil.	IDR 47,851 Mil.	IDR 63,072 Mil.	IDR 66,094 Mil.	IDR 105,273 Mil.
<b>Yearly Revenue Growth</b>	-	5.6%	31.8%	4.8%	59.3%

Notes :

1. Production and Sales Volume in Tonnage (Ton).
2. Assumption Price is Constant.
3. Year 1 sales amounted to 90% of production volume.
4. Year 2 sales of 95% of production volume.
5. Year 3 sales amounted to 100% of production volume.
6. Year 4 sales = 100% of production + sell 40% of year 1-2 stock.
7. Year 5 sales = 100% of production + sell 60% of year 1-2 stock 5.

Across the forecast period, there's a steady escalation in both production and sales volumes, indicative of a burgeoning demand for sustainable paper solutions. Despite a consistent price per kilogram, revenue estimations showcase a substantial upward trajectory, particularly highlighted by a notable 59.3% surge in the final year. This underscores the promising market potential and the efficacy of sustainable practices in the paper industry. However, sustaining such growth necessitates vigilant market surveillance and potential adjustments in production and sales strategies to remain agile in meeting evolving consumer preferences while continuing to champion environmental stewardship.

**Table 3. Cost Planning**

Human Resources					
Year	Y-1	Y-2	Y-3	Y-4	Y-5
Total	IDR	IDR	IDR	IDR	IDR
Operation	999,6 Mil.	1,961 Mil.	2,996 Mil.	3,013 Mil.	3,299 Mil.
Marketing	45,436 Mil.	40,587 Mil.	50,121 Mil.	50,123 Mil.	78,379 Mil.
Risk Management	500 Mil.	500 Mil.	500 Mil.	500 Mil.	500 Mil.
<b>Grand Total</b>	<b>47,236 Mil.</b>	<b>43,099 Mil.</b>	<b>53,667 Mil.</b>	<b>53,686 Mil.</b>	<b>82,229 Mil.</b>

Based on this planning, we can see that Human resources costs steadily rise, reflecting the need for additional workforce to support business growth. Operation costs fluctuate, possibly due to equipment maintenance or expansion needs. Marketing expenses remain stable, indicating sustained efforts to promote the business. Risk management costs decrease after the first year, followed by minimal fluctuations. Overall, expenses align with projected revenue growth, reflecting a balanced approach to financial planning aimed at maximizing profitability while ensuring long-term sustainability.

**Table 4. Investment Planning**

Capital Expenditure PT. RPH	
Total Tangible Asset	IDR 4,300,000,000
Total Intangible Asset	IDR 8,000,000
Total Asset	IDR 4,308,000,000
Depreciation & Amortization	IDR 319,200,000
<b>Total Capital Expenditure</b>	<b>IDR 4,627,200,000</b>



The company plans to allocate IDR 4,300,000,000 for tangible assets and IDR 8,000,000 for intangible assets, totaling IDR 4,308,000,000. With a depreciation and amortization expense of IDR 319,200,000, the total capital expenditure amounts to IDR 4,627,200,000. This reflects a strategic allocation of funds towards acquiring and maintaining assets essential for business operations.

**Table 5.** Capital Requirement Planning

<b>Total Capital Requirements PT. RPH</b>		
<b>Capital Expenditure</b>	IDR	4,627,200,000
<b>Operational Expenditure (1 Month Raw Material)</b>	IDR	3,047,500,000
<b>Operational Expenditure (1 Month Operational Cost)</b>	IDR	583,300,000
<b>Total Capital Requirements</b>	IDR	8,258,000,000

The total capital requirements amount to IDR 8,258,000,000, comprising the capital expenditure of IDR 4,627,200,000 and operational expenditures for one month of raw materials (IDR 3,047,500,000) and operational costs (IDR 583,300,000). This comprehensive assessment of financial needs underscores the necessity of adequate capitalization to support both initial investment and ongoing operational expenses, ensuring the business's viability and growth.

In summary, the business plan for the recycled paper hub outlines a comprehensive financial strategy spanning revenue, cost, investment, and capital requirements over a five-year period. Revenue projections indicate promising growth, driven by increasing production and sales volumes. Cost planning reflects a balanced approach, with gradual rises in human resources and operational expenses, alongside stable marketing and risk management costs. Investment planning underscores strategic allocation of funds towards tangible and intangible assets essential for business operations, while capital requirement planning highlights the total financial needs, encompassing capital expenditure and operational costs. Together, these analyses provide a holistic view of the financial landscape, guiding the business towards sustainable growth and long-term success.

PT. Recycled Paper Hub, based on sales estimates over 5 years, is projected to experience an increase in revenue of 31,8% in the 3rd year an increase of 59.3% in the 5th year.

**Financial Projection**

Financial Projections consist of Projected Income Statement, Balance Sheet and Cash Flow Statement.

**Table 6.** Income Statement

<b>Tahun</b>	<b>Ke 1</b>	<b>Ke 2</b>	<b>Ke 3</b>	<b>Ke 4</b>	<b>Ke 5</b>
<b>Jumlah Estimasi Pendapatan</b>	<b>IDR 45,333,000,000</b>	<b>IDR 47,851,500,000</b>	<b>IDR 63,072,000,000</b>	<b>IDR 66,094,200,000</b>	<b>IDR 105,273,300,000</b>
<b>Biaya Operasional</b>	<b>IDR 45,736,657,400</b>	<b>IDR 40,637,910,870</b>	<b>IDR 50,171,455,413</b>	<b>IDR 50,173,152,822</b>	<b>IDR 78,429,772,626</b>
Biaya Bahan Baku	IDR 36,570,000,000	IDR 36,570,000,000	IDR 45,792,000,000	IDR 45,792,000,000	IDR 73,140,000,000
Biaya Pembelian Mesin	IDR 2,000,000,000	IDR -	IDR -	IDR -	IDR -
Biaya Peralatan Lainnya	IDR 2,000,000,000	IDR -	IDR -	IDR -	IDR -
Biaya Pemeliharaan Mesin	IDR 350,000,000	IDR 350,000,000	IDR 437,500,000	IDR 437,500,000	IDR 700,000,000
Biaya Sewa Gudang	IDR 500,000,000	IDR 500,000,000	IDR 500,000,000	IDR 500,000,000	IDR 500,000,000
Biaya Vendor Transportasi	IDR 800,000,000	IDR 800,000,000	IDR 1,000,000,000	IDR 1,000,000,000	IDR 1,600,000,000



Biaya Sewa Mobil Operasional	IDR 650,000,000	IDR -	IDR -	IDR -	IDR -
Biaya Sewa Forklift	IDR 900,000,000	IDR 900,000,000	IDR 900,000,000	IDR 900,000,000	IDR 900,000,000
Biaya Sewa Wheel Loader	IDR 1,200,000,000	IDR 1,200,000,000	IDR 1,200,000,000	IDR 1,200,000,000	IDR 1,200,000,000
Biaya Penanganan Limbah	IDR 100,000,000	IDR 100,000,000	IDR 100,000,000	IDR 100,000,000	IDR 100,000,000
Biaya Operasional Lainnya	IDR 366,657,400	IDR 167,910,870	IDR 191,955,413	IDR 193,652,822	IDR 239,772,626
Biaya Manajemen Risiko	IDR 300,000,000	IDR 50,000,000	IDR 50,000,000	IDR 50,000,000	IDR 50,000,000
<b>Biaya SDM</b>	<b>IDR 999,600,000</b>	<b>IDR 1,961,484,000</b>	<b>IDR 2,996,487,232</b>	<b>IDR 3,013,695,107</b>	<b>IDR 3,299,458,488</b>
Gaji	IDR 960,000,000	IDR 968,400,000	IDR 1,160,737,200	IDR 1,171,365,276	IDR 1,279,085,347
Training	IDR 15,000,000	IDR 15,000,000	IDR 15,000,000	IDR 15,000,000	IDR 15,000,000
Overtime	IDR -	IDR -	IDR 58,036,860	IDR 58,568,264	IDR 63,954,267
THR	IDR -	IDR 968,400,000	IDR 1,160,737,200	IDR 1,171,365,276	IDR 1,279,085,347
Bonus dan Tunjangan Lain	IDR -	IDR -	IDR 580,368,600	IDR 585,682,638	IDR 639,542,673
BPJS	IDR 9,600,000	IDR 9,684,000	IDR 11,607,372	IDR 11,713,653	IDR 12,790,853
Rekrutment	IDR 15,000,000	IDR -	IDR 10,000,000	IDR -	IDR 10,000,000
<b>Biaya Pemasaran</b>	<b>IDR 500,000,000</b>	<b>IDR 500,000,000</b>	<b>IDR 500,000,000</b>	<b>IDR 500,000,000</b>	<b>IDR 500,000,000</b>
<b>Total Biaya</b>	<b>IDR 47,236,257,400</b>	<b>IDR 43,099,394,870</b>	<b>IDR 53,667,942,645</b>	<b>IDR 53,686,847,929</b>	<b>IDR 82,229,231,114</b>
<b>EBITDA</b>	<b>IDR (1,903,257,400)</b>	<b>IDR 4,752,105,130</b>	<b>IDR 9,404,057,355</b>	<b>IDR 12,407,352,071</b>	<b>IDR 23,044,068,886</b>
Beban Penyusutan	IDR -	IDR (320,000,000)	IDR (650,000,000)	IDR (960,000,000)	IDR (1,340,000,000)
Beban Amortisasi	IDR -	IDR (800,000)	IDR (1,600,000)	IDR (2,400,000)	IDR (3,200,000)
<b>EBIT</b>	<b>IDR (1,903,257,400)</b>	<b>IDR 4,432,105,130</b>	<b>IDR 8,754,057,355</b>	<b>IDR 11,447,352,071</b>	<b>IDR 21,704,068,886</b>
Pajak	IDR -	IDR (886,421,026)	IDR (1,750,811,471)	IDR (2,289,470,414)	IDR (4,340,813,777)
<b>Net Income</b>	<b>IDR (1,903,257,400)</b>	<b>IDR 3,545,684,104</b>	<b>IDR 7,003,245,884</b>	<b>IDR 9,157,881,657</b>	<b>IDR 17,363,255,109</b>

The business anticipates steady growth in revenue, driven by increasing production and sales volumes. Despite a consistent price per kilogram, revenue projections indicate significant expansion, culminating in a substantial surge in the final year. The income statement projects a positive trend in profitability, with revenue growth outpacing the incremental rise in expenses. This suggests a sound financial strategy aimed at maximizing profitability while maintaining operational stability and investing in future growth opportunities. Overall, the income statement summary presents a favorable outlook for the recycled paper hub business, indicating a path towards sustainable profitability and long-term success.

**Table 7. Balance Sheet**

Aktiva	Ke 1	Ke 2	Ke 3	Ke 4	Ke 5
Kas dan Bank	IDR 5,317,439,820	IDR 10,118,754,324	IDR 18,658,908,323	IDR 29,022,589,631	IDR 46,597,630,935
Piutang Dagang	IDR 2,278,902,780	IDR 4,336,608,996	IDR 7,996,674,995	IDR 12,438,252,699	IDR 19,970,413,258
Persediaan Barang Dagang	IDR 5,037,000,000	IDR 7,555,500,000	IDR -	IDR -	IDR -
<b>Total Aktiva Lancar</b>	<b>IDR 12,633,342,600</b>	<b>IDR 22,010,863,320</b>	<b>IDR 26,655,583,318</b>	<b>IDR 41,460,842,330</b>	<b>IDR 66,568,044,193</b>
Mesin Balling Press	IDR 2,000,000,000	IDR 1,900,000,000	IDR 1,800,000,000	IDR 1,700,000,000	IDR 1,600,000,000
<i>(Akumulasi Depresiasi)</i>	<i>IDR -</i>	<i>IDR (95,000,000)</i>	<i>IDR (180,000,000)</i>	<i>IDR (255,000,000)</i>	<i>IDR (320,000,000)</i>
Jembatan Timbang	IDR 1,100,000,000	IDR 1,100,000,000	IDR 1,100,000,000	IDR 1,100,000,000	IDR 1,100,000,000
<i>(Akumulasi Depresiasi)</i>	<i>IDR -</i>	<i>IDR (55,000,000)</i>	<i>IDR (110,000,000)</i>	<i>IDR (165,000,000)</i>	<i>IDR (220,000,000)</i>
Peralatan Tulis Kantor & Komputer	IDR 300,000,000	IDR 300,000,000	IDR 300,000,000	IDR 500,000,000	IDR 500,000,000
<i>(Akumulasi Depresiasi)</i>	<i>IDR -</i>	<i>IDR (60,000,000)</i>	<i>IDR (120,000,000)</i>	<i>IDR (180,000,000)</i>	<i>IDR (280,000,000)</i>



Hygrometer & EMCO	IDR 200,000,000	IDR 200,000,000	IDR 200,000,000	IDR 200,000,000	IDR 200,000,000
<i>(Akumulasi Depresiasi)</i>	IDR -	IDR (20,000,000)	IDR (40,000,000)	IDR (60,000,000)	IDR (80,000,000)
Kendaraan Operasional	IDR 400,000,000	IDR 400,000,000	IDR 400,000,000	IDR 400,000,000	IDR 400,000,000
<i>(Akumulasi Depresiasi)</i>	IDR -	IDR (20,000,000)	IDR (40,000,000)	IDR (60,000,000)	IDR (80,000,000)
APAR, Fire Hydrant, Safety Kit, CCTV	IDR 300,000,000	IDR 350,000,000	IDR 400,000,000	IDR 450,000,000	IDR 500,000,000
<i>(Akumulasi Depresiasi)</i>	IDR -	IDR (70,000,000)	IDR (160,000,000)	IDR (240,000,000)	IDR (360,000,000)
<b>Total Aktiva Tetap</b>	<b>IDR 4,300,000,000</b>	<b>IDR 3,930,000,000</b>	<b>IDR 3,550,000,000</b>	<b>IDR 3,390,000,000</b>	<b>IDR 2,960,000,000</b>
Izin Usaha	IDR 8,000,000	IDR 8,000,000	IDR 8,000,000	IDR 8,000,000	IDR 8,000,000
<i>(Amortisasi Izin Usaha)</i>	IDR -	IDR (800,000)	IDR (1,600,000)	IDR (2,400,000)	IDR (3,200,000)
<b>Total Aktiva Tidak Berwujud</b>	<b>IDR 8,000,000</b>	<b>IDR 7,200,000</b>	<b>IDR 6,400,000</b>	<b>IDR 5,600,000</b>	<b>IDR 4,800,000</b>
<b>Total Aktiva</b>	<b>IDR 16,941,342,600</b>	<b>IDR 25,948,063,320</b>	<b>IDR 30,211,983,318</b>	<b>IDR 44,856,442,330</b>	<b>IDR 69,532,844,193</b>
<b>Kewajiban</b>					
Utang Usaha	IDR 10,844,600,000	IDR 13,515,958,190	IDR 13,457,925,963	IDR 25,409,090,259	IDR 39,828,775,307
Utang Pajak	IDR -	IDR 886,421,026	IDR 1,750,811,471	IDR 2,289,470,414	IDR 4,340,813,777
<b>Total Kewajiban</b>	<b>IDR 10,844,600,000</b>	<b>IDR 14,402,379,216</b>	<b>IDR 15,208,737,434</b>	<b>IDR 27,698,560,673</b>	<b>IDR 44,169,589,085</b>
<b>Modal</b>					
Modal Investor	IDR 3,200,000,000	IDR 3,200,000,000	IDR 3,200,000,000	IDR 3,200,000,000	IDR 3,200,000,000
Modal Pemilik	IDR 4,800,000,000	IDR 4,800,000,000	IDR 4,800,000,000	IDR 4,800,000,000	IDR 4,800,000,000
Laba / Rugi Tahun Berjalan	IDR (1,903,257,400)	IDR 3,545,684,104	IDR 7,003,245,884	IDR 9,157,881,657	IDR 17,363,255,109
<b>Total Modal</b>	<b>IDR 6,096,742,600</b>	<b>IDR 11,545,684,104</b>	<b>IDR 15,003,245,884</b>	<b>IDR 17,157,881,657</b>	<b>IDR 25,363,255,109</b>
<b>Total Passiva</b>	<b>IDR 16,941,342,600</b>	<b>IDR 25,948,063,320</b>	<b>IDR 30,211,983,318</b>	<b>IDR 44,856,442,330</b>	<b>IDR 69,532,844,193</b>

Overall, the balance sheet of Recycled Paper Hub illustrates steady and sustainable growth. The expanding asset base signifies a commitment to scaling operations and investing in technology. The controlled increase in liabilities showcases strategic use of debt to fuel growth while maintaining financial health. Robust equity growth signifies strong investor confidence and the ability to generate and reinvest profits. As the company continues to grow, it remains committed to maintaining this balanced and sustainable financial trajectory, ensuring long-term success and value creation for stakeholders.

**Table 8.** Cash Flow

Proyeksi Arus Kas	Ke 1	Ke 2	Ke 3	Ke 4	Ke 5
<b>Arus Kas Kegiatan Operasi</b>					
<b>Kas Masuk</b>					
Pendapatan Operasional	IDR 45,333,000,000	IDR 47,851,500,000	IDR 63,072,000,000	IDR 66,094,200,000	IDR 105,273,300,000
<b>Kas Keluar</b>					
<i>(Biaya Bahan Baku)</i>	IDR (36,570,000,000)	IDR (36,570,000,000)	IDR (45,792,000,000)	IDR (45,792,000,000)	IDR (73,140,000,000)
<i>(Biaya Pemeliharaan Mesin)</i>	IDR (350,000,000)	IDR (350,000,000)	IDR (437,500,000)	IDR (437,500,000)	IDR (700,000,000)
<i>(Biaya Sewa Gudang)</i>	IDR (500,000,000)	IDR (500,000,000)	IDR (500,000,000)	IDR (500,000,000)	IDR (500,000,000)
<i>(Biaya Vendor Transportasi)</i>	IDR (800,000,000)	IDR (800,000,000)	IDR (1,000,000,000)	IDR (1,000,000,000)	IDR (1,600,000,000)
<i>(Biaya Mobil Operasional)</i>	IDR (650,000,000)	IDR -	IDR -	IDR -	IDR -
<i>(Biaya Sewa Forklift)</i>	IDR (900,000,000)	IDR (900,000,000)	IDR (900,000,000)	IDR (900,000,000)	IDR (900,000,000)
<i>(Biaya Sewa Wheel Loader)</i>	IDR (1,200,000,000)	IDR (1,200,000,000)	IDR (1,200,000,000)	IDR (1,200,000,000)	IDR (1,200,000,000)
<i>(Biaya Pemanganan Limbah)</i>	IDR (100,000,000)	IDR (100,000,000)	IDR (100,000,000)	IDR (100,000,000)	IDR (100,000,000)
<i>(Biaya Operasional Lainnya)</i>	IDR (366,657,400)	IDR (167,910,870)	IDR (191,955,413)	IDR (193,652,822)	IDR (239,772,626)
<i>(Safety Kit, First Aid)</i>	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)
<b>Total Arus Kas Kegiatan Operasi</b>	<b>IDR 3,871,342,600</b>	<b>IDR 7,238,589,130</b>	<b>IDR 12,925,544,587</b>	<b>IDR 15,946,047,178</b>	<b>IDR 26,868,527,374</b>



Arus Kas Kegiatan Investasi						
Kas Keluar						
(Mesin Balling Press)	IDR (2,000,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(Jembatan Timbang)	IDR (1,100,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(Peralatan Tulis Kantor & Komputer)	IDR (300,000,000)	IDR -	IDR -	IDR (200,000,000)	IDR -	IDR -
(Hygrometer & EMCO)	IDR (200,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(Kendaraan Operasional)	IDR (400,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(CCTV)	IDR (75,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(APAR)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)	IDR (25,000,000)
(Fire Hydrant)	IDR (75,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
(Genset)	IDR (100,000,000)	IDR -	IDR -	IDR -	IDR -	IDR -
<b>Total Arus Kas Kegiatan Investasi</b>	<b>IDR (4,275,000,000)</b>	<b>IDR (25,000,000)</b>	<b>IDR (25,000,000)</b>	<b>IDR (225,000,000)</b>	<b>IDR (25,000,000)</b>	<b>IDR (25,000,000)</b>
Arus Kas Kegiatan Pendanaan						
Kas Masuk						
Modal Pemilik	IDR 4,800,000,000	IDR -	IDR -	IDR -	IDR -	IDR -
Modal Investor	IDR 3,200,000,000	IDR -	IDR -	IDR -	IDR -	IDR -
Kas Keluar						
(Dividen)	IDR -	IDR (354,568,410)	IDR (700,324,588)	IDR (915,788,166)	IDR (1,736,325,511)	IDR -
<b>Total Arus Kas Kegiatan Pendanaan</b>	<b>IDR 8,000,000,000</b>	<b>IDR (354,568,410)</b>	<b>IDR (700,324,588)</b>	<b>IDR (915,788,166)</b>	<b>IDR (1,736,325,511)</b>	<b>IDR -</b>
<b>Kenaikan / Penurunan Kas</b>	<b>IDR 7,596,342,600</b>	<b>IDR 6,859,020,720</b>	<b>IDR 12,200,219,999</b>	<b>IDR 14,805,259,012</b>	<b>IDR 25,107,201,863</b>	<b>IDR -</b>
<b>Saldo Kas Awal</b>	<b>IDR -</b>	<b>IDR 7,596,342,600</b>	<b>IDR 14,455,363,320</b>	<b>IDR 26,655,583,318</b>	<b>IDR 41,460,842,330</b>	<b>IDR -</b>
<b>Saldo Kas Akhir</b>	<b>IDR 7,596,342,600</b>	<b>IDR 14,455,363,320</b>	<b>IDR 26,655,583,318</b>	<b>IDR 41,460,842,330</b>	<b>IDR 66,568,044,193</b>	<b>IDR -</b>

Overall, Recycled Paper Hub's cash flow performance demonstrates effective management and strategic planning. Positive cash flow from operations ensures operational stability, while strategic investments position the company for future growth. Balanced financing activities reflect a prudent approach to funding expansion. This solid cash flow performance supports the company's long-term sustainability and growth objectives.

### Feasibility Analysis

The investment feasibility analysis seen in this company is Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR).

**Table 9.** Net Present Value & Internal Rate of Return

Year	Beginning Cash Amount	Ending Cash Amount	PV	NPV	IRR
1	IDR -	IDR 7,596,342,600	IDR 6,782,448,750	IDR 6,782,448,750	-6.7%
2	IDR 7,596,342,600	IDR 14,455,363,320	IDR 11,523,727,136	IDR 18,306,175,886	-18.1%
3	IDR 14,455,363,320	IDR 26,655,583,318	IDR 18,972,917,700	IDR 37,279,093,586	36.8%
4	IDR 26,655,583,318	IDR 41,460,842,330	IDR 26,349,114,847	IDR 63,628,208,433	62.7%
5	IDR 41,460,842,330	IDR 66,568,044,193	IDR 37,772,496,008	IDR 101,400,704,441	18.7%

Payback Period Targeted : 3 Years  
 Profit / Loss Accumulation within 3 Years / 36 Months : IDR 8,645,672,588  
 Profit Accumulation within 34 Months : IDR 8,165,357,444  
 Intial Capital : IDR 8,000,000,000



Then, it is estimated that the payback period of PT. Recycled Paper Hub is in 34 Months (2 Year and 10 Months).

The feasibility analysis of Recycled Paper Hub demonstrates robust investment potential with a quick payback period of 34 months, a positive NPV over a 15% discount rate, and an impressive IRR of 18.7%. These metrics confirm that the business is financially sound and capable of delivering substantial returns, making it a promising venture for investors.

**Financial Performance Analysis**

No	Ratio	Formula	Y-1	Y-2	Y-3	Y-4	Y-5
1	Liquidity - Quick Ratio	Current Asset - Inventory / Current Liabilities	116.5%	152.8%	175.3%	149.7%	150.7%
	Liquidity - Current Ratio	Current Asset / Current Liabilities	116.5%	152.8%	175.3%	149.7%	150.7%
	Liquidity - Cash Ratio	Cash / Current Liabilities	49.0%	70.3%	122.7%	104.8%	105.5%
2	Profitability - Gross Profit Margin	Gross Profit / Sales	-4.2%	9.9%	14.9%	18.8%	21.9%
	Profitability - Net Profit Margin	Net Profit / Sales	-4.2%	7.4%	11.1%	13.9%	16.5%
3	Solvability - Debt to Asset	Total Liability / Total Asset	64.0%	55.5%	50.3%	61.7%	63.5%
	Solvability - Debt to Equity	Total Liability / Total Equity	177.9%	124.7%	101.4%	161.4%	174.1%
4	Activity - Receivable Turnover	Total Receivable / Average Receivable	24.2%	38.8%	59.4%	76.8%	100.0%
	Activity - Asset Turnover	Sales / Total Asset	267.6%	184.4%	208.8%	147.3%	151.4%

Recycled Paper Hub's financial performance over the past five years demonstrates notable improvements in liquidity and profitability. The quick and current ratios consistently hover around 150%, and the cash ratio more than doubles from 49.0% to approximately 105%, indicating strong liquidity. Profitability metrics show significant growth, with the gross profit margin rising from -4.2% to 21.9% and the net profit margin increasing from -4.2% to 16.5%. These trends reflect enhanced cost management and overall profitability.

However, solvency ratios show some fluctuation. The debt to asset ratio decreases initially but rises to 63.5% by Year 5, while the debt to equity ratio follows a similar pattern, ending at 174.1%. Activity ratios indicate improved efficiency, with receivable turnover reaching 100.0% and asset turnover stabilizing around 151.4%. Despite these fluctuations, Recycled Paper Hub has effectively managed its finances, demonstrating a strong ability to sustain and grow its operations.

**CONCLUSION**

The recycled paper business sector is experiencing significant growth as an innovative financing model, driven by increasing demand for sustainable products in Indonesia. PT. Recycled Paper Hub exemplifies this trend, demonstrating a consistent increase in assets over the first five years, reflecting alignment with long-term financial objectives. The company's income statement shows robust annual profit growth, with an impressive increase of 59.3% by the fifth year. Cash flow analysis reveals sufficient revenue generation to cover operational, investment, and financing costs, ensuring financial stability.





The investment feasibility analysis of PT. Recycled Paper Hub shows promising results, with a payback period of 2 years and 10 months and a positive return on investment, making the business attractive to investors. The company's liquidity ratios, including the quick and current ratios, are consistently around 150%, and the cash ratio has improved significantly from 49.0% to approximately 105%, indicating strong liquidity. Solvency ratios show a balanced approach to debt management, with the debt to asset ratio ending at 63.5% and the debt to equity ratio finishing at 174.1%.

Overall, PT. Recycled Paper Hub is well-positioned for continued success, with strong financial performance, strategic investments, and effective management practices. The company's profitability metrics show significant improvement, with the gross profit margin increasing from -4.2% to 21.9% and the net profit margin rising from -4.2% to 16.5%, reflecting enhanced efficiency. The positive feasibility analysis and strong financial ratios underscore the business's viability and potential for sustained growth and profitability in the recycled paper market.

## REFERENCE

- Agitha, N., Husodo, A. Y., Afwani, R., & Al Anshary, F. M. (2023). The Design of E-Commerce System to Increase Sales Productivity of Home Industry in Indonesia. *International Journal on Informatics Visualization*, 7(1). <https://doi.org/10.30630/joiv.7.1.1589>
- Aitken, A. (2019). Measuring Welfare Beyond GDP. *National Institute Economic Review*, 249(1). <https://doi.org/10.1177/002795011924900110>
- Brough, D., & Jouhara, H. (2020). The aluminium industry: A review on state-of-the-art technologies, environmental impacts and possibilities for waste heat recovery. In *International Journal of Thermofluids* (Vols. 1–2). <https://doi.org/10.1016/j.ijft.2019.100007>
- Damayanti, D., Wulandari, L. A., Bagaskoro, A., Rianjanu, A., & Wu, H. S. (2021). Possibility routes for textile recycling technology. In *Polymers* (Vol. 13, Issue 21). <https://doi.org/10.3390/polym13213834>
- Essalh, I. (2024). Public Financial Architecture in Morocco: Analysis of Mechanisms and Practices. *International Uni-Scientific Research Journal*, 5(1). <https://doi.org/10.59271/s45280.024.1841.3>
- Kleiner, G. B., Rybachuk, M. A., & Steblyanskaya, A. N. (2021). System balance index as an indicator of the Russian gas industry's sustainable growth. *Finance: Theory and Practice*, 25(4). <https://doi.org/10.26794/2587-5671-2021-25-4-37-47>
- Manihuruk, R. S., Arieftiara, D., & Miftah, M. (2021). Tax avoidance in the Indonesian manufacturing industry. *Journal of Contemporary Accounting*, 3(1). <https://doi.org/10.20885/jca.vol3.iss1.art1>
- Muna, N., Yasa, N. N. K., Ekawati, N. W., Wibawa, I. M. A., & Sri Subawa, N. (2023). Business network power as a process for enhancing firm performance: A perspective of RAToC. *Cogent Business and Management*, 10(2). <https://doi.org/10.1080/23311975.2023.2207620>
- Newell, R. G., Prest, B. C., & Sexton, S. E. (2021). The GDP-Temperature relationship: Implications for climate change damages. *Journal of Environmental Economics and Management*, 108. <https://doi.org/10.1016/j.jeem.2021.102445>
- Pallivalappil, A. S., & S. N., J. (2021). India's E-Commerce Industry's Growth and Projected Breakthroughs. *International Journal of Case Studies in Business, IT, and Education*. <https://doi.org/10.47992/ijcsbe.2581.6942.0137>
- Psychological Foundation of financial Planning. (2023). *Trends in Finance and Economics*, 1(3). <https://doi.org/10.46632/tfe/1/3/6>
- Rahman, M. R., Rahman, M. M., Subat, A., & Tarin, T. I. (2024). Does the pharmaceutical industry's growth relate to Bangladesh's macroeconomic stability? *International Journal of Pharmaceutical and Healthcare Marketing*, 18(2). <https://doi.org/10.1108/IJPHM-04-2023-0033>
- Reiter, O., & Stehrer, R. (2023). Assessing the importance of risky products in international trade and global value chains. *Empirica*, 50(1). <https://doi.org/10.1007/s10663-022-09560-x>
- Rybicka, J., Tiwari, A., & Leeke, G. A. (2016). Technology readiness level assessment of composites recycling technologies. *Journal of Cleaner Production*, 112. <https://doi.org/10.1016/j.jclepro.2015.08.104>
- Sreenivasan, A., & Suresh, M. (2023). Readiness of financial resilience in start-ups. *Journal of Safety Science and Resilience*, 4(3). <https://doi.org/10.1016/j.jnlssr.2023.02.004>

- Sugiyono, P. D. (2022). *Metode Penelitian Kualitatif Dan Kuantitatif*. CV Alfabeta.
- Tønnessen, M. (2023). Wasted GDP in the USA. *Humanities and Social Sciences Communications*, 10(1). <https://doi.org/10.1057/s41599-023-02210-y>
- Tsujimura, T. (2020). The engine that drives the industry's growth. In *Information Display* (Vol. 36, Issue 4). <https://doi.org/10.1002/msid.1122>
- van den Bergh, J. C. J. M. (2022). A procedure for globally institutionalizing a 'beyond-GDP' metric. *Ecological Economics*, 192. <https://doi.org/10.1016/j.ecolecon.2021.107257>
- Zainal Abidin, Z., Zainuddin, A., & Abdul Rahim, M. (2023). Financial Literacy and Retirement Planning Behaviour Among Working Single Women in Private Sector. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(6). <https://doi.org/10.47405/mjssh.v8i6.2389>

