AN ISO 9001 : 2015 CERTIFIED COMPANY

Detailed project report
Sample edition
Projections from FY 2027-28

Project report

# Activated Carbon Powder from Jute Sticks

Installed capacity 4.6 MT per day
Sector Specialty chemicals
Total project cost ₹426.65 lakh

**Illustrative sample**
Figures are representative

**Niir Project Consultancy Services**
106-E, Kamla Nagar, New Delhi 110007, India

www.niir.org
+91 90970 75054 | npcs.india@gmail.com

# Project at a glance

Activated Carbon Powder from Jute Sticks
4.6 MT per day

| | | | |
|---|---|---|---|
| Product | **Activated Carbon Powder from Jute Sticks** | Sector | **Specialty chemicals** |
| Installed capacity | **4.6 MT per day** | Annual capacity | **1,518 MT per year** |
| Selling price (ex-GST) | **₹69,000 per MT** | Working days | **330 a year** |
| Manpower | **23 people** | Plant and machinery | **₹217.96 lakh** |
| Total project cost | **₹426.65 lakh** | Promoter's contribution | **₹106.66 lakh (25%)** |
| Term loan | **₹319.99 lakh (75%)** | Cash credit limit | **₹72.48 lakh** |
| Revenue, Year 3 | **₹733.19 lakh at 70%** | Net profit, Year 3 | **₹79.58 lakh** |
| Return on investment | **18.6% a year** | Break-even, Year 3 | **41.4% of capacity** |
| Average DSCR | **1.66** | Payback period | **3.9 years** |

> This is an illustrative sample. Its figures are generated from industry-typical ratios to show the format and depth of an NPCS project report. They are not taken from any NPCS report or any real project, and should not be used for investment or lending decisions.

## Contents

1 Introduction
2 Uses and applications
3 Market potential
4 Manufacturing process
5 Raw materials
6 Plant and machinery
7 Land, building and utilities
8 Manpower
9 Licences and approvals
10 Project cost and means of finance
11 Working capital
12 Projected profitability
13 Cash flow statement
14 Projected balance sheet
15 Depreciation
16 Term loan repayment
17 Debt service coverage
18 Break-even analysis
19 Financial ratios
20 Key assumptions
21 Conclusion
A Annexure: monthly loan repayment schedule

Illustrative sample

# 1 Introduction

This sample report sets out the techno-economic case for a unit making activated carbon powder from jute sticks. The model plant has an installed capacity of 4.6 MT per day, which works out to 1,518 MT per year over 330 working days. Its applications range from drinking water and effluent treatment to carbon powder for inks, fireworks and batteries.

The sections that follow show how such a unit would be costed and financed, and how its profit, cash flow and loan repayment would look over the first five years. At 70% capacity utilisation in Year 3, the model unit earns revenue of ₹733.19 lakh and a net profit of ₹79.58 lakh.

# 2 Uses and applications

The product is bought for these main uses:

- Drinking water and effluent treatment
- Decolourising of sugar syrup and edible oils
- Purification of pharmaceuticals and fine chemicals
- Air and gas purification filters
- Carbon powder for inks, fireworks and batteries

# 3 Market potential

Powdered activated carbon from jute sticks is bought mainly by water and effluent treatment plants, sugar refiners, edible oil refiners and drug makers who need a fine, fast-acting carbon for decolourising and purification. Most supply in India comes from coconut shell, so a jute stick unit in the eastern jute belt competes on low raw material cost and on carbons with a high methylene blue value that suit colour removal. Buyers approve a supplier only after trial batches, so consistent iodine value, ash and mesh size decide repeat orders.

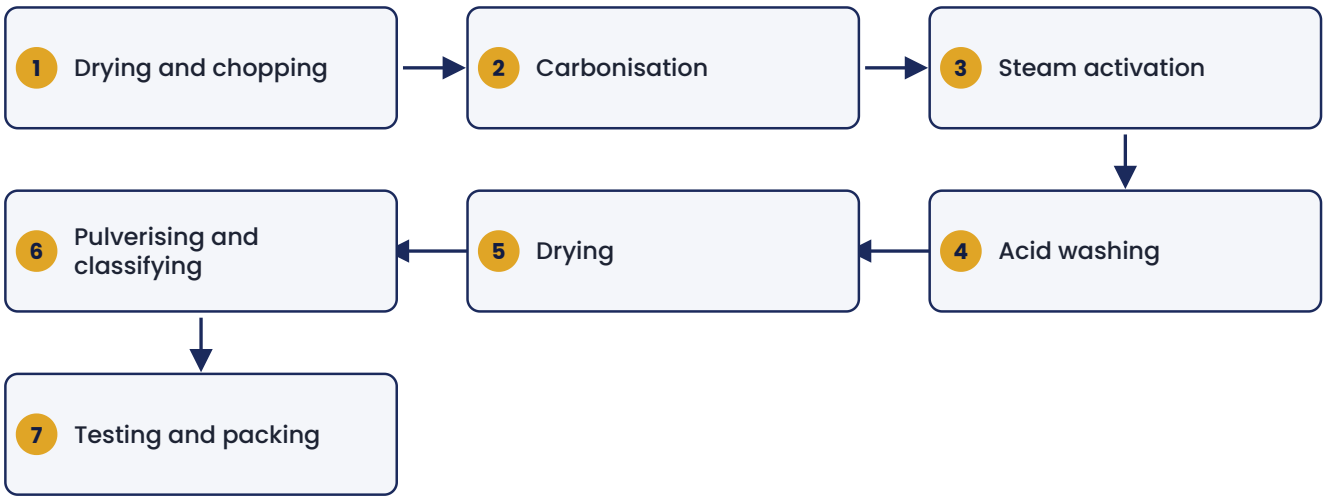
The usual customers for a unit of this kind are municipal and industrial water and effluent treatment plants; sugar mills and refineries; edible oil refineries; pharmaceutical and fine chemical manufacturers; ink, battery and fireworks makers; and chemical traders and exporters.

For a real project, the market survey is redone for the chosen location, covering present demand, expected growth and the existing manufacturers nearby.

Illustrative Sample

# 4 Manufacturing process

The plant converts raw materials into finished activated carbon powder from jute sticks in seven steps, shown in the flow chart and described below.




Process flow for activated carbon powder from jute sticks

1. **Drying and chopping.** Jute sticks are sun dried to low moisture and chopped into short pieces so they feed evenly into the retort.
2. **Carbonisation.** The chopped sticks are heated in a retort with little air so that volatile matter is driven off and a light char remains.
3. **Steam activation.** The char is fed to a rotary kiln at about 850 to 950 degrees Celsius where steam opens up the fine pore structure.
4. **Acid washing.** Activated char is washed with dilute hydrochloric acid and rinsed with water to bring down ash and iron.
5. **Drying.** The washed carbon is dried in a rotary dryer to the moisture limit set by the buyer.
6. **Pulverising and classifying.** A pulveriser with an air classifier grinds the carbon to fine powder of the required mesh size.
7. **Testing and packing.** Each batch is tested for iodine value, methylene blue value, ash and moisture, then packed in lined HDPE bags.

Illustrative sample

# 5 Raw materials

Raw materials account for 49.1% of sales at Year 3 volumes, a total of ₹360.26 lakh, with dry jute sticks (delivered) the biggest item in the mix.

| Raw material | Share of cost | Year 3 cost (₹ lakh) |
|---|---|---|
| Dry jute sticks (delivered) | 84.0% | 302.62 |
| Hydrochloric acid for ash washing | 11.0% | 39.63 |
| Soda ash for neutralising | 5.0% | 18.01 |
| **Total raw materials** | **100.0%** | **360.26** |

# 6 Plant and machinery

Plant and machinery for the model unit is estimated at ₹217.96 lakh, before the contingency allowance. The rotary steam activation kiln is the largest single item. A full NPCS report adds specifications and supplier names for each machine.

| Machinery and equipment | Indicative cost (₹ lakh) |
|---|---|
| Jute stick chopper and feed conveyor | 15.26 |
| Continuous carbonisation retort | 43.59 |
| Rotary steam activation kiln | 61.03 |
| Steam boiler with waste heat recovery | 26.15 |
| Acid washing and rinsing tanks | 15.26 |
| Rotary dryer | 17.44 |
| Pulveriser with air classifier | 21.79 |
| Bag filter and wet scrubber | 10.90 |
| Bag filling and stitching machine | 6.54 |
| **Total plant and machinery** | **217.96** |

# 7 Land, building and utilities

Land and site development is taken at ₹35.85 lakh and building and civil works at ₹99.87 lakh. Other fixed assets, including electrification, furniture, testing equipment and power backup, add ₹23.10 lakh. Land rates vary widely by location, so these are the figures most likely to change in a real project.

Power and fuel cost ₹56.68 lakh in Year 3, about 7.7% of sales. Water is needed for cleaning, domestic use and, where the process calls for it, production.

Illustrative sample

# 8 Manpower

Staffing for the model unit is 23 people, at a Year 1 cost of ₹50.82 lakh. Wages are escalated by 5% each year in the projections.

| Category | Number | Monthly wage (₹) | Annual cost (₹ lakh) |
|---|---|---|---|
| Management, supervision and administration | 3 | 32,500 | 11.70 |
| Skilled workers and operators | 8 | 20,500 | 19.68 |
| Semi-skilled and unskilled workers | 12 | 13,500 | 19.44 |
| **Total (Year 1)** | **23** | | **50.82** |

# 9 Licences and approvals

A unit of this kind typically needs the following registrations and approvals. Requirements vary by state and by the exact product, so confirm them with the local authorities before applying.

- Udyam (MSME) registration
- GST registration
- Consent to establish and consent to operate from the State Pollution Control Board
- Factory licence or registration under the applicable labour law, where the workforce threshold applies
- Fire safety NOC, where required
- Trade licence from the local body
- Orange category in the CPCB classification of January 2025 (activated carbon manufacturing with steam activation), which sets the consent conditions
- Registration of the steam boiler under the Boilers Act, 2025
- IS 8366 specification for powdered activated carbons as the quality reference

Illustrative sample

# 10 Project cost and means of finance

Setting up the unit costs ₹426.65 lakh in all, of which plant and machinery is ₹217.96 lakh. The estimate includes a 5% contingency on building and machinery, pre-operative expenses and the margin money needed to start working capital.

| Cost of project | ₹ lakh |
|---|---|
| Land and site development | 35.85 |
| Building and civil works | 99.87 |
| Plant and machinery | 217.96 |
| Other fixed assets (electrification, furniture, lab equipment, DG set) | 23.10 |
| Contingencies | 15.89 |
| Preliminary and pre-operative expenses | 9.82 |
| Margin money for working capital | 24.16 |
| **Total cost of project** | **426.65** |

## Means of finance

The project is financed 75:25 between bank debt and the promoter's own funds. A term loan covers ₹319.99 lakh and the promoter brings in ₹106.66 lakh. Separately, a cash credit limit of ₹72.48 lakh finances 75% of the working capital requirement.

| Source of funds | ₹ lakh |
|---|---|
| Promoter's contribution (25%) | 106.66 |
| Term loan from bank (75%) | 319.99 |
| **Total means of finance** | **426.65** |
| *Cash credit limit for working capital (separate)* | *72.48* |

Illustrative sample

# 11 Working capital

The unit needs ₹96.64 lakh of working capital in Year 1, based on 30 days of raw material stock, 15 days of finished goods and 45 days of customer credit, net of 30 days of supplier credit. Of this, ₹72.48 lakh comes from the bank and ₹24.16 lakh from the promoter.

| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Raw material stock (30 days) | 25.38 | 27.50 | 29.61 | 31.73 | 33.84 |
| Work in progress (3 days) | 3.36 | 3.62 | 3.89 | 4.16 | 4.42 |
| Finished goods (15 days) | 18.23 | 19.67 | 21.11 | 22.56 | 24.02 |
| Trade receivables (45 days) | 77.48 | 83.94 | 90.39 | 96.85 | 103.31 |
| **Total current assets** | **124.45** | **134.73** | **145.00** | **155.30** | **165.59** |
| Less: trade creditors (30 days) | 27.81 | 30.12 | 32.44 | 34.76 | 37.08 |
| **Working capital requirement** | **96.64** | **104.61** | **112.56** | **120.54** | **128.51** |

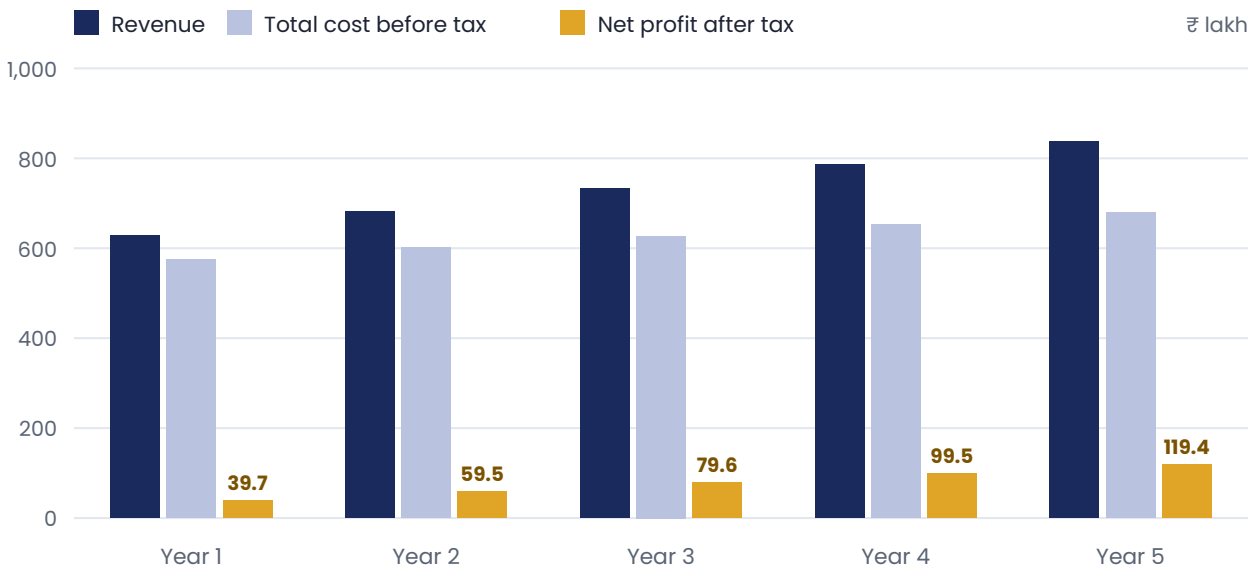
Illustrative sampl

# 12 Projected profitability

The unit is profitable from the first year, with a net profit of ₹39.70 lakh on sales of ₹628.45 lakh. By Year 5 sales reach ₹837.94 lakh and net profit ₹119.36 lakh, giving an average net margin of 10.6% across the projection.

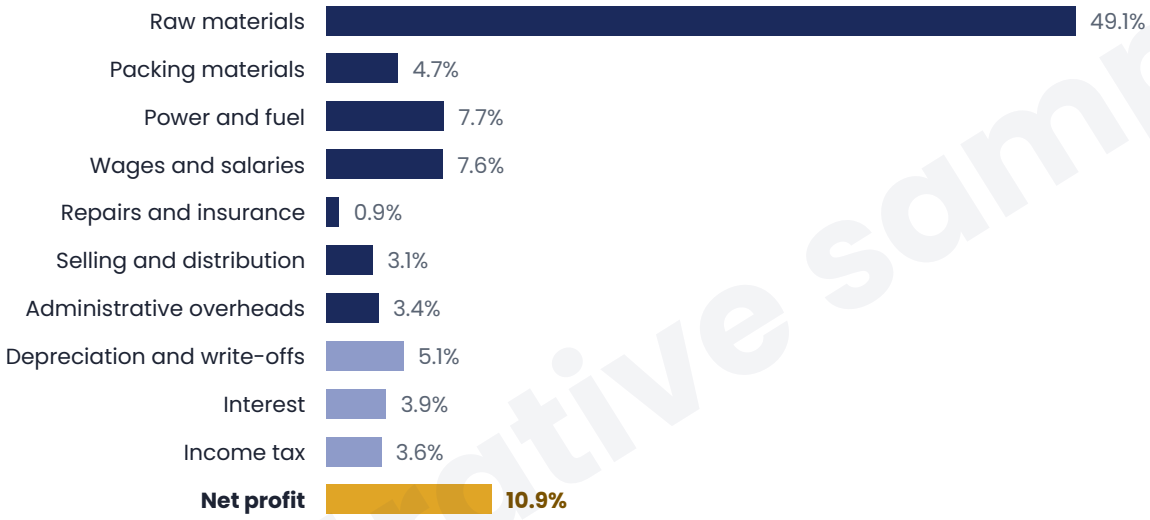
| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| *Capacity utilisation (%)* | *60%* | *65%* | *70%* | *75%* | *80%* |
| **Revenue from operations** | **628.45** | **680.82** | **733.19** | **785.56** | **837.94** |
| Raw materials consumed | 308.80 | 334.53 | 360.26 | 385.99 | 411.73 |
| Packing materials | 29.53 | 31.99 | 34.45 | 36.91 | 39.37 |
| Power and fuel | 48.59 | 52.63 | 56.68 | 60.73 | 64.78 |
| Wages and salaries | 50.82 | 53.36 | 56.03 | 58.83 | 61.77 |
| Repairs and maintenance | 4.36 | 4.58 | 4.81 | 5.05 | 5.30 |
| Insurance | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| **Cost of production** | **443.53** | **478.52** | **513.66** | **548.94** | **584.38** |
| **Gross profit** | **184.92** | **202.30** | **219.53** | **236.62** | **253.56** |
| Selling and distribution expenses | 19.20 | 20.80 | 22.40 | 24.00 | 25.60 |
| Administrative overheads | 22.75 | 23.89 | 25.08 | 26.34 | 27.65 |
| **Operating profit (EBITDA)** | **142.97** | **157.61** | **172.05** | **186.28** | **200.31** |
| Depreciation | 47.13 | 40.70 | 35.16 | 30.40 | 26.32 |
| Preliminary expenses written off | 1.96 | 1.96 | 1.96 | 1.96 | 1.98 |
| Interest on term loan | 32.98 | 27.68 | 20.86 | 13.29 | 4.89 |
| Interest on cash credit | 7.97 | 7.97 | 7.97 | 7.97 | 7.97 |
| **Profit before tax** | **52.93** | **79.30** | **106.10** | **132.66** | **159.15** |
| Income tax | 13.23 | 19.82 | 26.52 | 33.16 | 39.79 |
| **Profit after tax** | **39.70** | **59.48** | **79.58** | **99.50** | **119.36** |

Illustrative sample




Revenue, total cost before tax and net profit after tax, ₹ lakh

## Where each rupee of sales goes in Year 3




Each cost head as a percentage of Year 3 sales

Illustrative sample

# 13 Cash flow statement

Cash generated from profit and depreciation covers the term loan repayments in every year. The closing cash balance builds up to ₹235.29 lakh by the end of Year 5.

| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| **Sources of funds** | | | | | |
| Promoter's contribution | 106.66 | – | – | – | – |
| Term loan from bank | 319.99 | – | – | – | – |
| Cash credit (working capital) from bank | 72.48 | – | – | – | – |
| Net profit after tax | 39.70 | 59.48 | 79.58 | 99.50 | 119.36 |
| Depreciation | 47.13 | 40.70 | 35.16 | 30.40 | 26.32 |
| Preliminary expenses written off | 1.96 | 1.96 | 1.96 | 1.96 | 1.98 |
| Increase in trade creditors | 27.81 | 2.31 | 2.32 | 2.32 | 2.32 |
| **Total sources** | **615.73** | **104.45** | **119.02** | **134.18** | **149.98** |
| **Application of funds** | | | | | |
| Fixed assets | 392.67 | – | – | – | – |
| Preliminary and pre-operative expenses | 9.82 | – | – | – | – |
| Increase in inventories | 46.97 | 3.82 | 3.82 | 3.84 | 3.83 |
| Increase in trade receivables | 77.48 | 6.46 | 6.45 | 6.46 | 6.46 |
| Repayment of term loan | 28.59 | 61.85 | 68.67 | 76.24 | 84.64 |
| Drawings | – | – | – | – | – |
| Total application | 555.53 | 72.13 | 78.94 | 86.54 | 94.93 |
| **Net cash flow** | **60.20** | **32.32** | **40.08** | **47.64** | **55.05** |
| Opening cash balance | – | 60.20 | 92.52 | 132.60 | 180.24 |
| **Closing cash balance** | **60.20** | **92.52** | **132.60** | **180.24** | **235.29** |

Illustrative sample

# 14 Projected balance sheet

Over the projection, retained profits build the promoter's net worth from ₹138.50 lakh to ₹504.28 lakh, and the term loan reduces from ₹291.40 lakh to nil as it is repaid.

| As at year end (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| **Liabilities** | | | | | |
| Promoter's capital | 106.66 | 106.66 | 106.66 | 106.66 | 106.66 |
| Reserves and surplus | 39.70 | 99.18 | 178.76 | 278.26 | 397.62 |
| Term loan | 291.40 | 229.55 | 160.88 | 84.64 | – |
| Cash credit from bank | 72.48 | 72.48 | 72.48 | 72.48 | 72.48 |
| Trade creditors | 27.81 | 30.12 | 32.44 | 34.76 | 37.08 |
| **Total liabilities** | **538.05** | **537.99** | **551.22** | **576.80** | **613.84** |
| **Assets** | | | | | |
| Gross fixed assets | 392.67 | 392.67 | 392.67 | 392.67 | 392.67 |
| Less: accumulated depreciation | (47.13) | (87.83) | (122.99) | (153.39) | (179.71) |
| **Net fixed assets** | **345.54** | **304.84** | **269.68** | **239.28** | **212.96** |
| Preliminary expenses not written off | 7.86 | 5.90 | 3.94 | 1.98 | – |
| Inventories | 46.97 | 50.79 | 54.61 | 58.45 | 62.28 |
| Trade receivables | 77.48 | 83.94 | 90.39 | 96.85 | 103.31 |
| Cash and bank balance | 60.20 | 92.52 | 132.60 | 180.24 | 235.29 |
| **Total assets** | **538.05** | **537.99** | **551.22** | **576.80** | **613.84** |

Illustrative sample

# 15 Depreciation

Fixed assets are depreciated on the written-down value method, at 15% a year for plant and machinery, 10% for building and 10% for other assets. Land carries no depreciation. Preliminary and pre-operative expenses are written off in equal parts over five years.

| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Building and civil works (cost ₹104.86 lakh, 10% WDV) | | | | | |
| Opening written-down value | 104.86 | 94.37 | 84.93 | 76.44 | 68.80 |
| Depreciation | 10.49 | 9.44 | 8.49 | 7.64 | 6.88 |
| **Closing written-down value** | **94.37** | **84.93** | **76.44** | **68.80** | **61.92** |
| Plant and machinery (cost ₹228.86 lakh, 15% WDV) | | | | | |
| Opening written-down value | 228.86 | 194.53 | 165.35 | 140.55 | 119.47 |
| Depreciation | 34.33 | 29.18 | 24.80 | 21.08 | 17.92 |
| **Closing written-down value** | **194.53** | **165.35** | **140.55** | **119.47** | **101.55** |
| Other fixed assets (cost ₹23.10 lakh, 10% WDV) | | | | | |
| Opening written-down value | 23.10 | 20.79 | 18.71 | 16.84 | 15.16 |
| Depreciation | 2.31 | 2.08 | 1.87 | 1.68 | 1.52 |
| **Closing written-down value** | **20.79** | **18.71** | **16.84** | **15.16** | **13.64** |
| **Total depreciation** | **47.13** | **40.70** | **35.16** | **30.40** | **26.32** |
| Preliminary expenses written off | 1.96 | 1.96 | 1.96 | 1.96 | 1.98 |

# 16 Term loan repayment

The term loan of ₹319.99 lakh carries interest at 10.5% a year. Only interest is paid during the 6-month moratorium, after which the loan is repaid in 54 equal monthly instalments of ₹7,46,095. The month-by-month schedule is in the annexure.

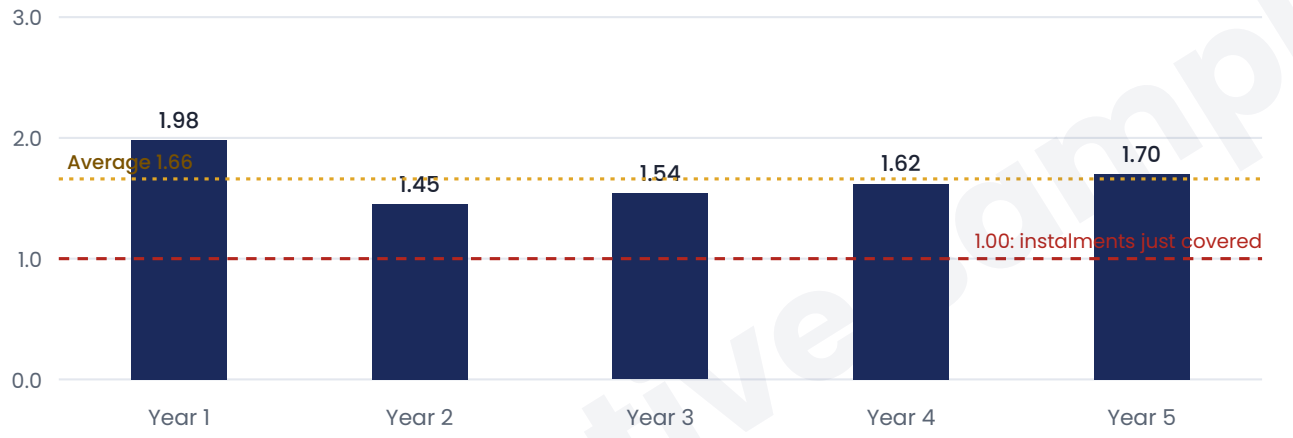
| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Opening balance | 319.99 | 291.40 | 229.55 | 160.88 | 84.64 |
| Interest | 32.98 | 27.68 | 20.86 | 13.29 | 4.89 |
| Principal repaid | 28.59 | 61.85 | 68.67 | 76.24 | 84.64 |
| **Closing balance** | **291.40** | **229.55** | **160.88** | **84.64** | **–** |

Illustrative sample

# 17 Debt service coverage

Cash available for debt service covers the term loan instalments 1.66 times on average, and never less than 1.45 times (Year 2).

| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Net profit after tax | 39.70 | 59.48 | 79.58 | 99.50 | 119.36 |
| Depreciation and write-offs | 49.09 | 42.66 | 37.12 | 32.36 | 28.30 |
| Interest on term loan | 32.98 | 27.68 | 20.86 | 13.29 | 4.89 |
| **Total available for debt service (A)** | **121.77** | **129.82** | **137.56** | **145.15** | **152.55** |
| Principal repayment | 28.59 | 61.85 | 68.67 | 76.24 | 84.64 |
| Interest on term loan | 32.98 | 27.68 | 20.86 | 13.29 | 4.89 |
| **Total debt service (B)** | **61.57** | **89.53** | **89.53** | **89.53** | **89.53** |
| DSCR (A / B) | 1.98 | 1.45 | 1.54 | 1.62 | 1.70 |



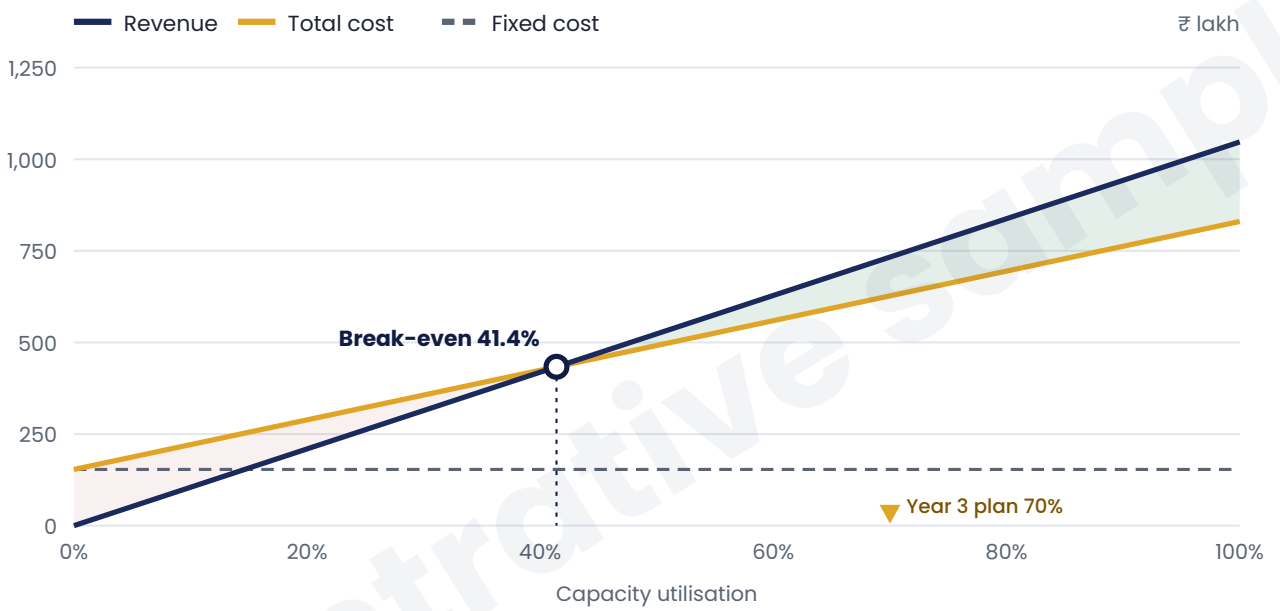

DSCR by year. A ratio above 1.00 means cash accruals cover the term loan instalments.

Illustrative sample

# 18 Break-even analysis

The break-even point in Year 3 is 41.4% of installed capacity. Below that level the unit would not cover its fixed costs, interest and depreciation; above it, each additional unit sold adds to profit. Cash break-even is lower, at 31.4%.

| Particulars (₹ lakh) | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Revenue from operations | 628.45 | 680.82 | 733.19 | 785.56 | 837.94 |
| Variable costs | 406.12 | 439.95 | 473.79 | 507.63 | 541.48 |
| **Contribution** | **222.33** | **240.87** | **259.40** | **277.93** | **296.46** |
| Fixed costs (incl. depreciation and interest) | 169.40 | 161.57 | 153.30 | 145.27 | 137.31 |
| Break-even as % of installed capacity | 45.7 | 43.6 | 41.4 | 39.2 | 37.1 |
| Cash break-even as % of installed capacity | 32.5 | 32.1 | 31.4 | 30.5 | 29.4 |
| Break-even sales | 478.84 | 456.68 | 433.30 | 410.60 | 388.10 |




Break-even chart at Year 3 prices and costs, scaled to full capacity. Shaded areas show the loss zone (left) and profit zone (right).

Illustrative sample

# 19 Financial ratios

Liquidity and leverage improve over the projection. The current ratio stays at or above 1.84, while debt-equity drops from 2.10 to zero as the term loan is repaid.

| Ratio | Year 1 FY 2027-28 | Year 2 FY 2028-29 | Year 3 FY 2029-30 | Year 4 FY 2030-31 | Year 5 FY 2031-32 |
|---|---|---|---|---|---|
| Current ratio | 1.84 | 2.21 | 2.65 | 3.13 | 3.66 |
| Quick ratio | 1.37 | 1.72 | 2.13 | 2.58 | 3.09 |
| Debt-equity ratio (term loan / net worth) | 2.10 | 1.15 | 0.57 | 0.22 | 0.00 |
| Total outside liabilities / net worth | 2.83 | 1.66 | 0.94 | 0.50 | 0.22 |
| Interest coverage ratio | 2.29 | 3.22 | 4.68 | 7.24 | 13.38 |
| DSCR | 1.98 | 1.45 | 1.54 | 1.62 | 1.70 |
| Gross profit margin (%) | 29.4 | 29.7 | 29.9 | 30.1 | 30.3 |
| Operating profit (EBITDA) margin (%) | 22.7 | 23.2 | 23.5 | 23.7 | 23.9 |
| Net profit margin (%) | 6.3 | 8.7 | 10.9 | 12.7 | 14.2 |
| Return on capital employed (%) | 18.7 | 22.9 | 26.2 | 28.5 | 29.8 |
| Break-even (% of installed capacity) | 45.7 | 43.6 | 41.4 | 39.2 | 37.1 |

# 20 Key assumptions

- Commercial production starts in April 2027, and all assets are in use from the first year.
- Capacity utilisation of 60% in Year 1, rising to 80% by Year 5, over 330 working days a year.
- Selling price of ₹69,000 per MT, excluding GST, held constant through the projection.
- Raw materials at 49.1% of sales, packing materials at 4.7%, power and fuel at 7.7%, and selling and distribution at 3.1%.
- Wages and salaries rise by 5% a year; repairs and administrative overheads rise by 5% a year.
- Working capital based on 30 days of raw material, 3 days of work in progress, 15 days of finished goods and 45 days of receivables, less 30 days of creditors.
- Term loan at 10.5% interest with a 6-month moratorium and 54 monthly instalments; cash credit at 11% on 75% of the working capital requirement.
- Depreciation on the written-down value method at Income Tax Act rates; income tax at a flat 25% of profit for simplicity.
- Contingency of 5% on building and machinery; preliminary and pre-operative expenses written off over five years.
- All amounts in ₹ lakh unless stated otherwise, excluding GST.

Illustrative sample

# 21 Conclusion

On these illustrative assumptions, an activated carbon powder from jute sticks unit of 4.6 MT per day costs ₹426.65 lakh to set up, earns an average return of 18.6% on that investment and pays back in about 3.9 years. An average DSCR of 1.66 and break-even at 41.4% of capacity point to a project that can carry its bank debt. Actual figures depend on the location, the machinery chosen, input prices and the promoter's plans, which is why a full report is prepared for each project.

**Need this report for your own plant?**

NPCS prepares detailed project reports and bank-format DPRs for your capacity, location and loan scheme, with machinery quotations, supplier lists and a market survey for your area.

Call or WhatsApp
+91 90970 75054

Email
npcs.india@gmail.com

Website
www.niir.org

This document is a computer-generated illustrative sample. The capacity, prices, costs and projections are representative assumptions for a typical small-scale unit and are not based on any specific project, location or quotation. Statutory requirements change and vary by state. Niir Project Consultancy Services accepts no liability for decisions taken on the basis of this sample.

Illustrative sample

# A Annexure: monthly loan repayment schedule

Term loan of ₹319.99 lakh at 10.5% a year. Amounts in ₹ lakh.

| No. | Month | Opening balance | Interest | Principal | Instalment | Closing balance |
|---|---|---|---|---|---|---|
| 1 | Apr 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 2 | May 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 3 | Jun 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 4 | Jul 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 5 | Aug 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 6 | Sep 2027 | 319.99 | 2.80 | – | 2.80 | 319.99 |
| 7 | Oct 2027 | 319.99 | 2.80 | 4.66 | 7.46 | 315.33 |
| 8 | Nov 2027 | 315.33 | 2.76 | 4.70 | 7.46 | 310.63 |
| 9 | Dec 2027 | 310.63 | 2.72 | 4.74 | 7.46 | 305.88 |
| 10 | Jan 2028 | 305.88 | 2.68 | 4.78 | 7.46 | 301.10 |
| 11 | Feb 2028 | 301.10 | 2.63 | 4.83 | 7.46 | 296.27 |
| 12 | Mar 2028 | 296.27 | 2.59 | 4.87 | 7.46 | 291.40 |
| 13 | Apr 2028 | 291.40 | 2.55 | 4.91 | 7.46 | 286.49 |
| 14 | May 2028 | 286.49 | 2.51 | 4.95 | 7.46 | 281.54 |
| 15 | Jun 2028 | 281.54 | 2.46 | 5.00 | 7.46 | 276.54 |
| 16 | Jul 2028 | 276.54 | 2.42 | 5.04 | 7.46 | 271.50 |
| 17 | Aug 2028 | 271.50 | 2.38 | 5.09 | 7.46 | 266.42 |
| 18 | Sep 2028 | 266.42 | 2.33 | 5.13 | 7.46 | 261.29 |
| 19 | Oct 2028 | 261.29 | 2.29 | 5.17 | 7.46 | 256.11 |
| 20 | Nov 2028 | 256.11 | 2.24 | 5.22 | 7.46 | 250.89 |
| 21 | Dec 2028 | 250.89 | 2.20 | 5.27 | 7.46 | 245.63 |
| 22 | Jan 2029 | 245.63 | 2.15 | 5.31 | 7.46 | 240.31 |
| 23 | Feb 2029 | 240.31 | 2.10 | 5.36 | 7.46 | 234.96 |
| 24 | Mar 2029 | 234.96 | 2.06 | 5.41 | 7.46 | 229.55 |
| 25 | Apr 2029 | 229.55 | 2.01 | 5.45 | 7.46 | 224.10 |
| 26 | May 2029 | 224.10 | 1.96 | 5.50 | 7.46 | 218.60 |
| 27 | Jun 2029 | 218.60 | 1.91 | 5.55 | 7.46 | 213.05 |
| 28 | Jul 2029 | 213.05 | 1.86 | 5.60 | 7.46 | 207.45 |
| 29 | Aug 2029 | 207.45 | 1.82 | 5.65 | 7.46 | 201.81 |
| 30 | Sep 2029 | 201.81 | 1.77 | 5.70 | 7.46 | 196.11 |
| 31 | Oct 2029 | 196.11 | 1.72 | 5.74 | 7.46 | 190.37 |
| 32 | Nov 2029 | 190.37 | 1.67 | 5.80 | 7.46 | 184.57 |
| 33 | Dec 2029 | 184.57 | 1.61 | 5.85 | 7.46 | 178.73 |
| 34 | Jan 2030 | 178.73 | 1.56 | 5.90 | 7.46 | 172.83 |
| 35 | Feb 2030 | 172.83 | 1.51 | 5.95 | 7.46 | 166.88 |
| 36 | Mar 2030 | 166.88 | 1.46 | 6.00 | 7.46 | 160.88 |
| 37 | Apr 2030 | 160.88 | 1.41 | 6.05 | 7.46 | 154.83 |
| 38 | May 2030 | 154.83 | 1.35 | 6.11 | 7.46 | 148.72 |
| 39 | Jun 2030 | 148.72 | 1.30 | 6.16 | 7.46 | 142.56 |

Illustrative sample

| No. | Month | Opening balance | Interest | Principal | Instalment | Closing balance |
|---|---|---|---|---|---|---|
| 40 | Jul 2030 | 142.56 | 1.25 | 6.21 | 7.46 | 136.35 |
| 41 | Aug 2030 | 136.35 | 1.19 | 6.27 | 7.46 | 130.08 |
| 42 | Sep 2030 | 130.08 | 1.14 | 6.32 | 7.46 | 123.76 |
| 43 | Oct 2030 | 123.76 | 1.08 | 6.38 | 7.46 | 117.38 |
| 44 | Nov 2030 | 117.38 | 1.03 | 6.43 | 7.46 | 110.94 |
| 45 | Dec 2030 | 110.94 | 0.97 | 6.49 | 7.46 | 104.45 |
| 46 | Jan 2031 | 104.45 | 0.91 | 6.55 | 7.46 | 97.91 |
| 47 | Feb 2031 | 97.91 | 0.86 | 6.60 | 7.46 | 91.30 |
| 48 | Mar 2031 | 91.30 | 0.80 | 6.66 | 7.46 | 84.64 |
| 49 | Apr 2031 | 84.64 | 0.74 | 6.72 | 7.46 | 77.92 |
| 50 | May 2031 | 77.92 | 0.68 | 6.78 | 7.46 | 71.14 |
| 51 | Jun 2031 | 71.14 | 0.62 | 6.84 | 7.46 | 64.30 |
| 52 | Jul 2031 | 64.30 | 0.56 | 6.90 | 7.46 | 57.40 |
| 53 | Aug 2031 | 57.40 | 0.50 | 6.96 | 7.46 | 50.45 |
| 54 | Sep 2031 | 50.45 | 0.44 | 7.02 | 7.46 | 43.43 |
| 55 | Oct 2031 | 43.43 | 0.38 | 7.08 | 7.46 | 36.35 |
| 56 | Nov 2031 | 36.35 | 0.32 | 7.14 | 7.46 | 29.20 |
| 57 | Dec 2031 | 29.20 | 0.26 | 7.21 | 7.46 | 22.00 |
| 58 | Jan 2032 | 22.00 | 0.19 | 7.27 | 7.46 | 14.73 |
| 59 | Feb 2032 | 14.73 | 0.13 | 7.33 | 7.46 | 7.40 |
| 60 | Mar 2032 | 7.40 | 0.06 | 7.40 | 7.46 | – |

Illustrative sample