

pinyapel[®]

PINEAPPLE, PEOPLE, PLANET.

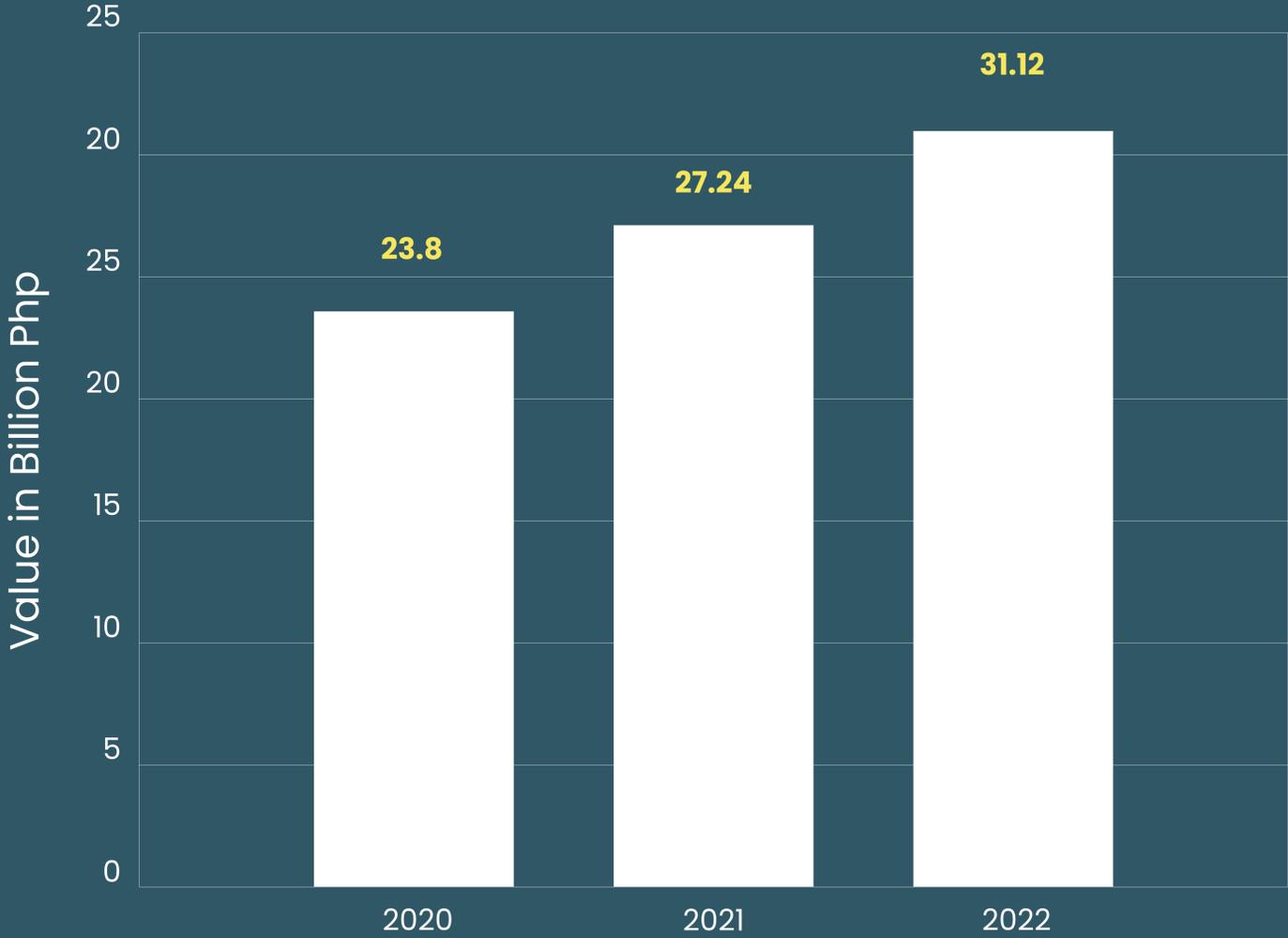
PINYAPEL INVESTORS FORUM





Industrializing the manufacture of a non-wood pulp from pineapple plantation residues

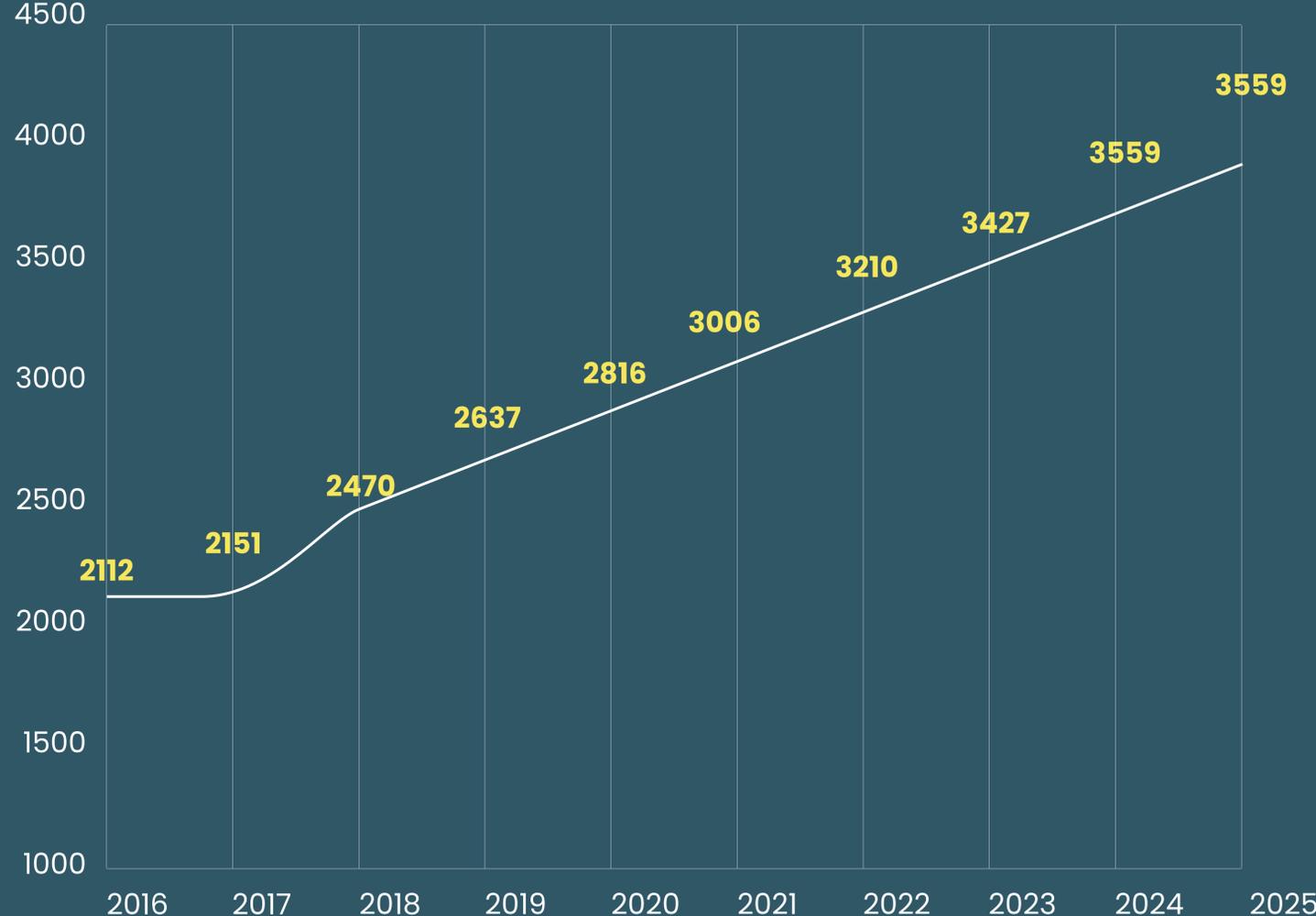
Gross Value Added from the Manufacturing of Paper and Paper Products, 2022



PHP 31.1B

Gross Value

Projected Domestic Demand of Pulp and Paper



2.1%

5-y Average AGR

5,076,000

Tons by 2029

Shifted Environmental Pressure

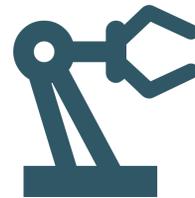
Existing Vulnerabilities of the Paper and Pulp Industry



**Demand for
eco-friendly
paper
packaging**



**Reliance
on recycled
paper limiting
paper quality**



**Limited
resources
& technology**



**Environmental
pressure &
deforestation**



**Undersupplied
local non-
wood option**

Pinyapel: The Search of the Non-wood Resource

Seizing the Opportunity at the Intersection of the Pulp, Paper, and Pineapple Industries



 **3rd**

World's third-largest pineapple producer

 **2.86M**

Tons of pineapples produced in 2021

 **1.3M**

Approximate tons of agricultural residue from pineapple leaves annually

 **98%**

Only 2% of the pineapple leaves are utilized for fiber production, leaving us with 98% of waste





The Facility: Pinyapel Pulp Mill



20 metric Tons / Day



Strategically in Mindanao



ESG-Focused Impact

Full Chemical Pulp

Price: \$1,850/MT

Gross Profit Margin: **29.12%**

Chemi-Mechanical Pulp

Price: \$950/MT

Gross Profit Margin: **17.19%**



Addressing the Segment Needs



Handmade Paper Papercraft Makers

Declined market share due to loss of cost competitiveness



Industry revival through **improved quality and cost competitiveness**



Molded Pulp Manufacturers

Struggled to meet evolving standards due to reliance on recycled paper as raw material



Upgrade and diversify up to 20% of manufacturing capacity



Recycled Paper Mills

Majority of pulp requirements is imported to meet quality and demand



Inclusion of 5-10% pinyapel pulp as **valuable and cost-effective enhancer** compared to imported pulp



Non-wood Virgin Pulp for Export Market

Underutilized annual production capacity due to shortage of abaca fiber locally



Pinyapel as **another source of non-wood virgin pulp** with potential to develop an export market of 10,000 tons annually



Competitive Advantages



Media Traction



ESG Framework for Pinyapel



United Nations SDGs





Future of the Pulp and Paper Industry

3 potential scenarios in the paper and packaging sector:

- 1 Substitute Economy**
Alternative materials or new products

- 2 Circularity Breakthrough**
Development in recycling industry

- 3 Green Shift**
Reducing material demand and redefining the value chain into a circular flow



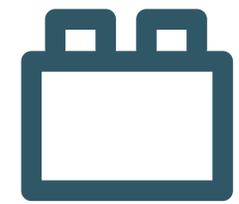
**Non-Wood
Fiber:**
Europe's
Direction for
paper and board



**Textile
Innovations**
Marimekko
and Spinnova

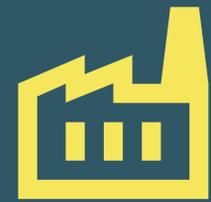


**Paper Wine
Bottles**
Wine bottle
made from
94% recycled
paperboard



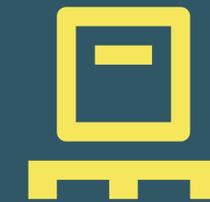
**Lego
Sustainability
Initiatives**
Aims for fully
plant-based
bricks by 2030

Investment options



Aggressive Option

Financing a full-scale industrial plant (20 TPD)



Conservative Option

Outsourcing production from existing non-wood pulp mills such as the four abaca mills



pinyapel®
PINEAPPLE, PEOPLE, PLANET.

Creative Tool

for improving the quality, competitiveness,
and branding of Filipino products in the Global Market

Forerunners of Design Center's
SMART Materials Development Program

Strategic Tool

of value creation for sustainable economic
growth and development

Proven expertise and competence in materials research,
design, innovation and product development

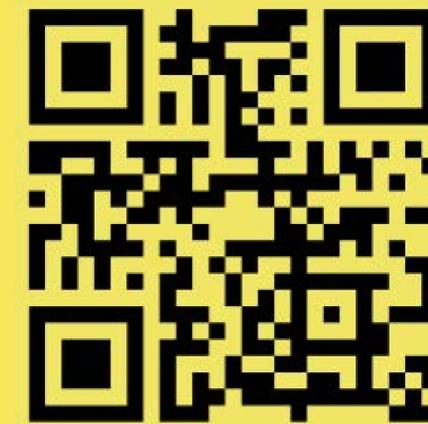
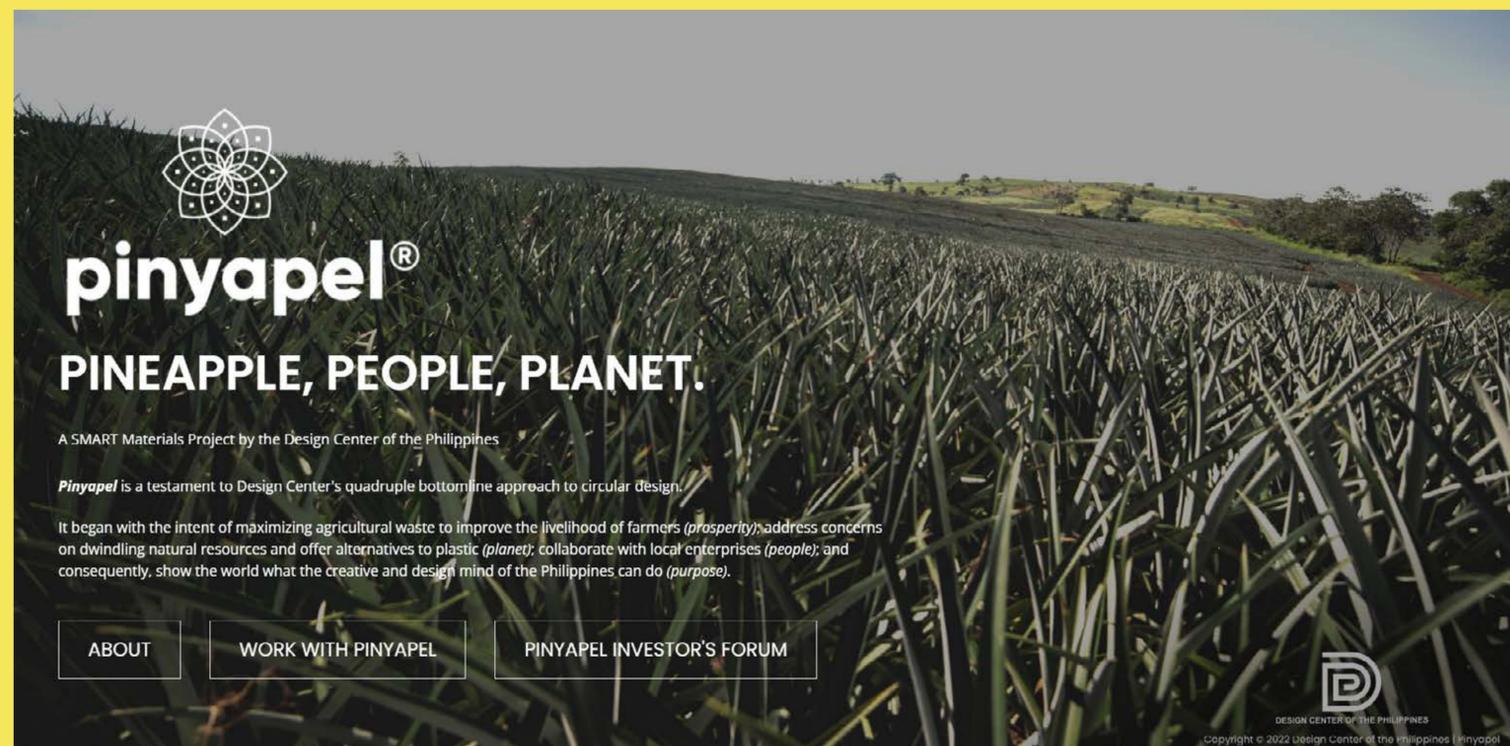
Innovative Tool

for enhancing the quality of human life

Experienced professionals from diverse fields including
agriculture, bioscience, biotechnology, materials
and chemical, engineering, and industrial design.

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This landing page features Pinyapel's collaterals – background and information, partners and products, product lookbook, video presentations as well as Pinyapel Investors Forum update



Landing
Page



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