



Pantaleon

# **SUSTAINABILITY IN THE SUGAR INDUSTRY**

# WHAT IS SUSTAINABILITY?

## MAINSTREAM DEFINITION



## ALTERNATE APPROACH

ECONOMIC DEVELOPMENT ACTIVITY THAT MEETS THE NEEDS OF THE PRESENT WITHOUT COMPRISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS.

MAINTAINING THE CAPACITY OF ECOLOGICAL SYSTEMS TO SUPPORT SOCIAL AND ECONOMIC SYSTEMS

FOR BUSINESS, THIS MEANS THE **ADAPTIVE CAPACITY OF THE BUSINESS TO RESPOND TO SOCIO-ECOLOGICAL SYSTEMS CHANGES**, WHILE MAINTAINING ITS GENERATION OF VALUE ACROSS TIME.

# SUSTAINABILITY FRAMEWORKS

## APPROACH A

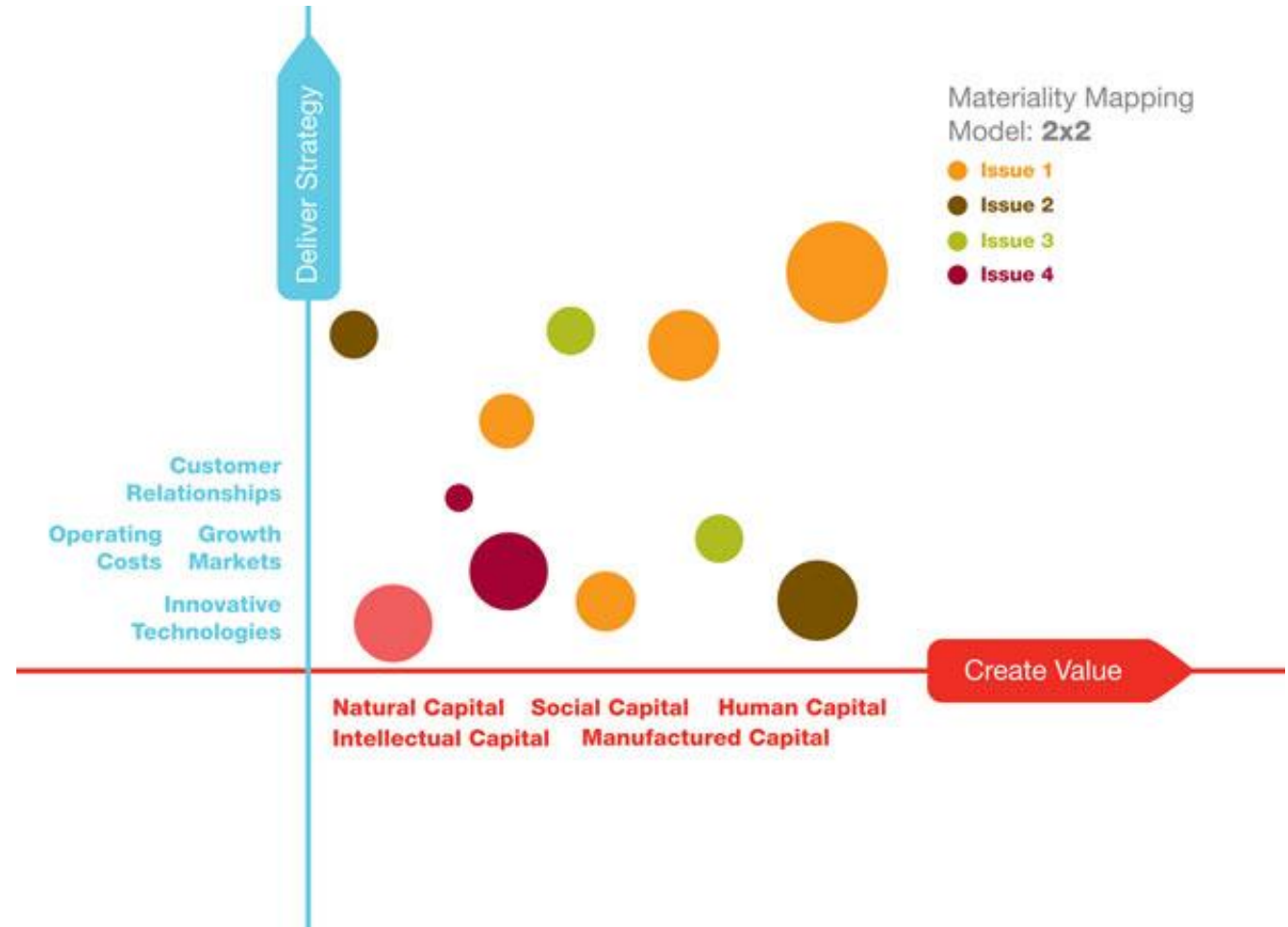
**IDENTIFICATION OF ESG ISSUES WITHIN THE COMPANY AROUND THREE VALUE CREATION AREAS: GROWTH, RISK MANAGEMENT AND RETURNS ON CAPITAL**



# SUSTAINABILITY FRAMEWORKS

## APPROACH B

**MATERIALITY ANALYSIS  
RANKS ESG ISSUES THAT  
IMPACT TWO THINGS:  
THE ABILITY TO DELIVER  
COMPANY STRATEGY THE  
ABILITY TO CREATE VALUE**



# SUSTAINABILITY ISSUES FACED BY THE SUGAR INDUSTRY

## **ECOLOGIC**

- WATER STEWARDSHIP
- EMISSIONS
- AGROCHEMICAL USE
- WASTE MANAGEMENT

## **SOCIAL**

- LABOR
- COMMUNITY DEVELOPMENT
- SUPPLY CHAIN TRANSPARENCY
- PROPERTY RIGHTS

# PANTALEON



**SUGAR**



**ENERGY**



**ETHANOL**



**MOLASSES**

**Panuco (MX)**  
White, Raw sugar  
Molasses  
Energy

**Monte Rosa (NI)**  
Brown, White and raw sugar  
Molasses and HTM  
Energy

**Pantaleon (GT)**  
Refined, Brown, White  
and Raw sugar  
Alcohol, molasses and HTM  
Energy  
**Concepcion (GT)**  
Refined, Organic\*, White and  
Raw sugar  
Molasses  
Energy

**Panor (CL)**  
Refined and brown sugar  
Comercialization

**Vale do Paraná (BR)**  
Raw sugar  
Alcohol



**85,000 ton / day**  
milling capacity  
installed



**1.34 MM ton / year**  
of sugar  
produced



**677 GWh / year**  
of energy sold



**188,000 m<sup>3</sup> / year**  
of alcohol  
produced

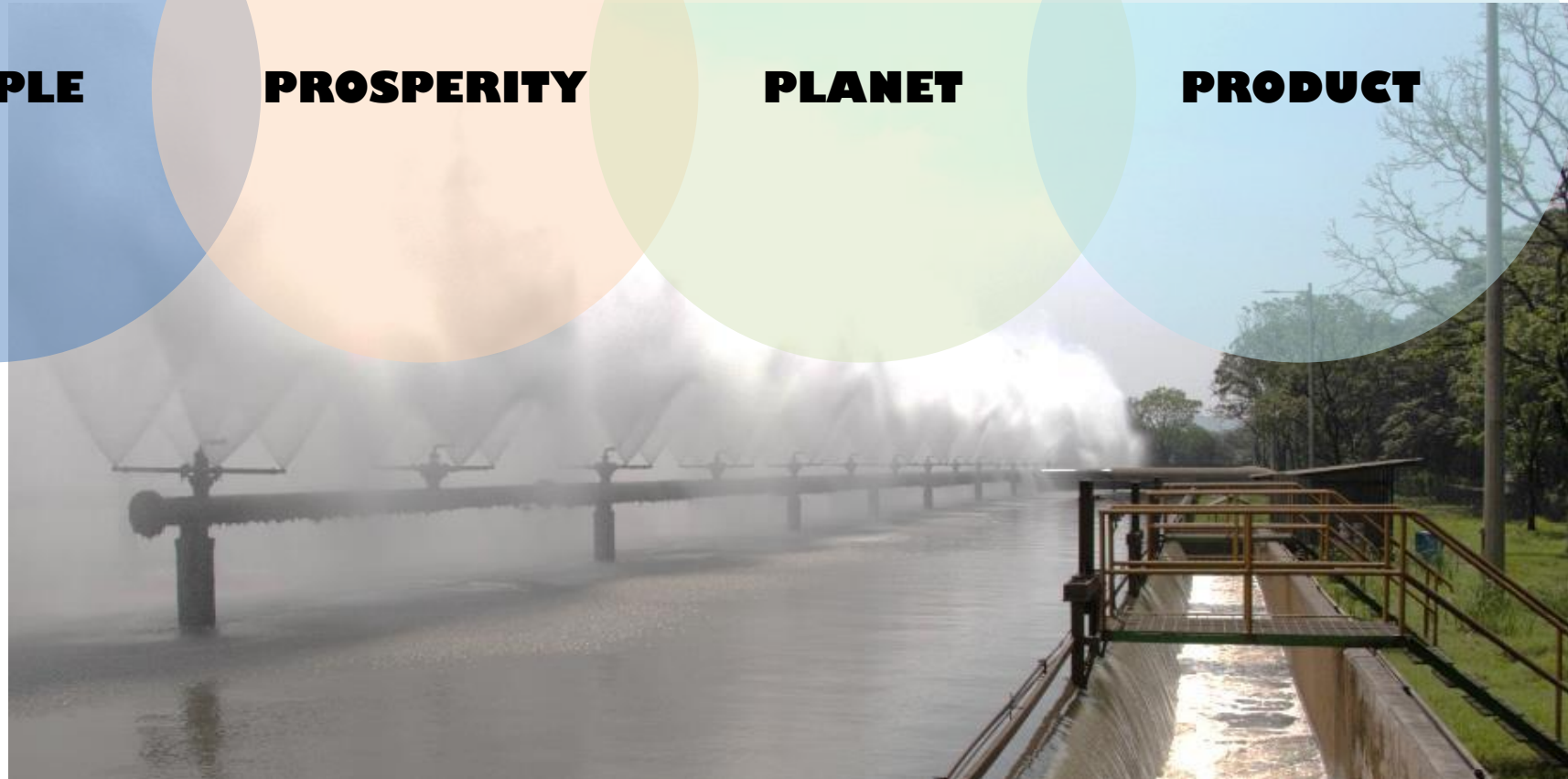
# OUR SUSTAINABILITY APPROACH

**PEOPLE**

**PROSPERITY**

**PLANET**

**PRODUCT**



# OCCUPATIONAL HEALTH & SAFETY AND RESPONSIBLE LABOR CONDITIONS



**PEOPLE**



# CHANGING THE SOCIAL LANDSCAPE



**PROSPERITY**

# WATER STEWARDSHIP



**PLANET**

# WASTE MANAGEMENT



**PLANET**

# MECHANIZED HARVESTING

**64%**  
Guatemala

**50%**  
Honduras

**95%**  
Nicaragua

**26%**  
México

**100%**  
Brasil



# SUGAR



**PRODUCT**

# CANE SUPPLY CHAIN



## SUPPLIER CODE OF CONDUCT

Defines the standard and vision of Pantaleon towards its suppliers.



## SUPPLIER MANUAL

Instruction guideline for cane suppliers as to how to comply with legal requirements.



## ACTION PLANS & MONITORING

Individual action plans elaborated for each cane supplier, subject to verification by an external auditor.

**PRODUCT**

<b>THEME</b>	<b>ISSUE (INDICATOR)</b>	<b>BASELINE (2013)</b>	<b>RESULT (2018)</b>
<b>PEOPLE</b>	INDUSTRIAL SAFETY (LTI FREQUENCY RATE)	FR: 8.60 LTI	FR: 1.89 LTI
<b>PLANET</b>	INDUSTRIAL WATER USE (M3 / TONNE OF CANE)	6.83 M3 / TONNE OF CANE	2.56 M3 / TONNE OF CANE
	GHG EMISSIONS (TCO2 EQ./ TONNE OF SUGAR)	0.372 TCO2 EQ / TONNE OF SUGAR	0.261 tCO2 eq / TC
	AIR EMISSIONS (< 100 PST MG / NM3)	32% OF BOILERS COMPLY	85% OF BOILERS COMPLY
	AGROCHEMICAL USE (KG / HA)	N/A	7.21 KG / HA
<b>PROSPERITY</b>	COMMUNITY DEVELOPMENT (# PROGRAMS / \$ INVESTED)	N/A	11 PROGRAMS \$ 1.5 MM INVESTED / YR
	COMMUNITY RELATIONS (# COMMUNITY COMPLAINTS)	N/A	85 COMMUNITY COMPLAINTS
<b>PRODUCT</b>	SUPPLY CHAIN SUSTAINABILITY	N/A	GT: 49/80 AUDITED FARMERS

# INNOVATION





# TRANSPARENCY IN THE SUPPLY CHAIN: CERTIFICATIONS



Source: [www.sustainabilitymap.com](http://www.sustainabilitymap.com)

[www.pantaleon.com](http://www.pantaleon.com)



Contact: [casensio@pantaleon.com](mailto:casensio@pantaleon.com)