SUSTAINABLE RISKS & MATERIALITY
SET & SBDI
CORPORATE SUSTAINABILITY DEVELOPMENT PROCESS

Implementation
- Structure
- Programs
- Responsibility

Analysis of Impacts, Risks and Opportunities
- ESRM
- Materiality

Employee & Stakeholders Engagement
- Awareness
- Knowledge
- Participation

Sustainability Risk & Materiality

Sustainability Initiatives

Evaluation
- Sustainability Value
  - Financial value
  - Non financial value

Supply Chain & Stakeholder Engagement

CSR/SD Report

Preliminary (Context Analysis)

Principles & International Standards
- Sustainable Development
- Creating Shared Value
- Dow Jones Sustainability Index
- Global Reporting Initiative: G4
- Integrated Reporting

Sustainability performance
- Economic
- Social
- Environment
  (Global Reporting Initiative: G4)
SESSION I: SUSTAINABILITY RISKS
ความเสี่ยงด้านความยั่งยืน (SUSTAINABILITY RISKS) คืออะไร
หน้าที่ของเรา (หน่วยงาน SD/CSR) กับการบริหารจัดการความเสี่ยงด้านความยั่งยืนขององค์กร (ENTERPRISE SUSTAINABILITY RISK MANAGEMENT) คืออะไร
SUSTAINABILITY STRATEGY

License to Operate
License to Growth
License to Sustainability

Trust
Performance
Competitive Advantage

Corporate Sustainability

Economic
Social
Environment

Business Strategy & Sustainability Strategy
Levels of the Licence to Operate

- Psychological Identification
- Approval
- Acceptance
- Withheld/Withdrawn

- Trust Boundary
- Credibility Boundary
- Legitimacy Boundary
COSO Enterprise Risk Management and Sustainability

Social
- Public policy and advocacy
- Community investments
- Working conditions
- Health/nutrition
- Diversity
- Human rights
- Socially responsible investing
- Anticorruption and bribery
- Safety

Environmental
- Energy-fuel, oil, alternative
- Water
- Greenhouse gases
- Emissions
- Waste reduction: medical; hazardous; non-hazardous; construction
- Recycling
- Reprocessing/re-use
- Green cleaning
- Agriculture/organic foods
- Packaging
- Product content
- Biodiversity

Economic
- Accountability/transparency
- Corporate governance
- Stakeholder value
- Economic performance
- Financial objectives

Source, "The COSO ERM Framework", COSO, 2004
HOW TO DEFINE SUSTAINABILITY RISKS?
SUSTAINABILITY
S03-SUSTAINABILITY INITIATIVES

SUPPLY CHAIN - BUSINESS MODEL & STAKEHOLDER ENGAGEMENT

PRIORITIZES
ISSUES - MAINS & SUPPORTS STAKEHOLDERS

Balance | Respect
Purpose | Share

Sustainability Risk Management

SUSTAINABILITY COMMITMENT

SUSTAINABILITY STRATEGIES
- ENVIRONMENT
- SOCIAL
- GOVERNANCE
- MANAGEMENT (LINKAGES)

SUSTAINABILITY INITIATIVES
SUSTAINABLE BUSINESS MODEL
NOVELIS

SUSTAINABILITY LIFE CYCLE MODEL

AstraZeneca

SUSTAINABILITY BUSINESS MODEL

Inputs
- Unmet medical need
- Economic, social and political environment
- Science and technology
- Employees
- Relationships
- IP
- Infrastructure

Business model
How we create and sustain value over the life-cycle of a medicine across our chosen therapy areas

Investment, including targeted business development, in the R&D, Manufacturing and Supply, and Sales and Marketing of innovative medicines.

Established products

Growth platforms

Pipeline

Reinvestment of returns from sales, collaborations, out-licensing and divestments into the business and business development to develop and sustain the next generation of innovative medicines.

Outputs

- Life-changing medicines
  - Improved health outcomes
  - Improved access to healthcare
  - Reduced healthcare costs
  - Community development

- Revenue and cash flow

- Returns to shareholders

Purpose and values

Coca-Cola: Value chain process

Our manufacturing and distribution process

Value chain process:
- Ingredients
- Packaging

Manufacturing:
- No. 16 Energy and Renewable Energy
- No. 15 Energy and Climate Change

Distribution:
- No. 17 Transportation and Distribution
- No. 13 & 14 Diversity and Workplace

Refrigeration:
- No. 18 Cold Drinks Equipment

Recycling:
- No. 9 Product Portfolio
- No. 10 Responsible Sales and Marketing
- No. 11 Active Healthy Living
- No. 12 Community
- No. 20 Recycling

Factsheet number (No.):
- No. 23 Sustainable Agriculture
- No. 19 Sustainable Packaging
- No. 22 Protecting and Replenishing the Water We Use
- No. 21 Water Stewardship
- No. 7 Suppliers and Sustainability

Source: Coca-Cola Enterprise, Corporate Responsibility Report 2013-2014
BUSINESS MODEL

To facilitate understanding of the connection between our financial and non-financial performance, we present a simplified diagram of Fibria’s business model, following the proposal of the International Integrated Reporting Council (IIRC). According to the IIRC, integrated disclosure must address the relevant externalities affecting the company, as well as resources and relationships used and affected, and how the business model interacts with externalities and the resources and relationships used to create and maintain value over time.

DEFINE SUSTAINABILITY RISKS

LIFE CYCLE
Input - Process - Output

VALUE CHAIN
MANAGEMENT

Stakeholders
Issues

Risks
Phenomenal
Economy
Social
Environment

Stakeholders
Issues

Risks
## SUSTAINABILITY RISK

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Detail</th>
<th>Aspects</th>
<th>Response</th>
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<tbody>
<tr>
<td><strong>Strategic Risks</strong></td>
<td>Sustainability issues, many of which can have a significant strategic impact. These range from marketing position and changing consumer demand to strategic investments, stakeholder communications and investor relations.</td>
<td>- Customer expectation: Green product, ethical consumption,</td>
<td>- Sustainable suppliers program</td>
</tr>
<tr>
<td><strong>Operational Risks</strong></td>
<td>The impacts that surrounds business operations is expected to continue for the foreseeable future.</td>
<td>- License to operate: brand &amp; reputation,</td>
<td>- Life cycle assessment</td>
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<tr>
<td></td>
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<td>- Violence weather</td>
<td>- Stakeholder engagement: community, social.</td>
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<tr>
<td><strong>Compliance Risks</strong></td>
<td>Regulatory compliance risks resulting from an increasing number of international, national and regional programs.</td>
<td>- Health and safety, human rights and labor laws, anti-bribery and environmental law &amp; regulation.</td>
<td>- SEC (56-1)</td>
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<tr>
<td></td>
<td></td>
<td>- Audit and verification programs.</td>
<td>- Audit and verification programs.</td>
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<tr>
<td><strong>Reporting Risks</strong></td>
<td>CSR/Sustainability reporting.</td>
<td>- Sustainability standards.</td>
<td>- Disclosure &amp; transparency program.</td>
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<td>- Sustainability indices.</td>
<td>- GRI Report</td>
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<td>- Integrated Report</td>
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<td>- THSI, DJSI</td>
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</table>
## SUSTAINABILITY RISKS

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<tr>
<th>Risks Types</th>
<th>Economy</th>
<th>Social</th>
<th>Environment</th>
<th>Why risk?</th>
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HOW TO EVALUATE THEM?
SOCIAL RISKS & OPPORTUNITIES TO AMPLIFIED
**SUNCOR**

**Opportunity to Amplify**

<table>
<thead>
<tr>
<th>Severity</th>
<th>Probability</th>
<th>Impact</th>
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<tbody>
<tr>
<td>7</td>
<td>Practically impossible (&lt;10^-5)</td>
<td>Impact &gt; $100 M</td>
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<tr>
<td>6</td>
<td>Remote possibility, but conceivable (&lt;10^-4)</td>
<td>$10 M - $100 M</td>
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<tr>
<td>5</td>
<td>Highly unusual event combination (&lt;10^-3)</td>
<td>$1 M - $10 M</td>
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<tr>
<td>4</td>
<td>Realistic scenario, but surprised if it happened (&lt;10^-2)</td>
<td>$100 k - $1 M</td>
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<tr>
<td>3</td>
<td>Reasonable, though not certain chance of loss (&lt;10^-1)</td>
<td>$10 k - $100 k</td>
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<td>2</td>
<td>Significant possibility of loss (&lt;10^-1)</td>
<td>$1 k - $10 k</td>
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<tr>
<td>1</td>
<td>Almost inevitable that loss occurs this year (&lt;10^-1)</td>
<td>Impact &lt; $1 k</td>
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</tbody>
</table>

- *Imitation*
- *Perception*
- *Brand*
- *Conflict*

**What happens next?:**

**Opportunity to Amplified: OTA**

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<thead>
<tr>
<th>Phenomenal</th>
<th>Impact</th>
<th>Likelihood</th>
<th>OTA (x 1 \text{ to } 5)</th>
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**Risks**

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<tr>
<th>Impact to Sustainability Strategy</th>
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<tr>
<td>Short term</td>
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**Sustainability Missteps**

- *Social Media*
- *Technology*
- *Word of mouth*
- *etc.*
HOW TO MANAGE THEM?
Committee Structures for Risk and Corporate Responsibility

Board

Board Committees
- Risk Committee
- Corporate Responsibility Committee

Executive Directorate
- Enterprise Risk Committee
- Corporate Responsibility Steering Committee

Communication Channels
SESSION II: MATERIALITY
CSR & Industry

ประเด็นมุ่งเน้นที่เป็นมาตรฐานทั่วไป
ประเด็นที่เป็นความท้าทายในแต่ละอุตสาหกรรม
ประเด็นที่สร้างความสามารถทางการแข่งขันให้กับธุรกิจ
Sustainability Risks & Materiality

Material Issues

- RISKS
- CONTEXTS
- STANDARDS
- CHALLENGES
- Economic
- Social
- Environment

- IMPACT
- STRATEGY
- BUSINESS DIRECTION
- OPPORTUNITY
- TRENDS
- STAKEHOLDER (ICE)
SUSTAINABLE COMPETITIVE ADVANTAGE

Monitor and Report

Risk Management

Actions

Identify and Prioritise

Take Action

Corporate Strategy

Stakeholder Engagement

Close Perception Gaps

Identify and Prioritise

Source: MTR, Sustainability Report 2015
DEFINE MATERIAL ASPECTS AND BOUNDARIES

STEP 1: Identification
STEP 2: Prioritization
STEP 3: Validation
STEP 4: Review

Source: globalreporting.org
FIGURE 3: An example where the topic of anti-corruption is only relevant to certain entities within the organization.

FIGURE 4: An example where the topic of child labor is only relevant to certain entities outside of the organization.

Source: globalreporting.org
Figure 5: An example where the topic of emissions is relevant within and outside of the organization.

Source: globalreporting.org
EVIDENCE OF ECONOMIC IMPACT

ISSUES

• Revenue Impact
• Return on Capital
• Risk Management
• Management Quality

Source: The Sustainability Accounting Standard Board, SASB Materiality Map.
IMPACT & CAPITAL

1. ENVIRONMENT
   - Climate change risks
   - Environmental accidents and remediation
   - Water use and management
   - Energy management
   - Fuel management and transportation
   - GHG emissions and air pollution
   - Waste management and effluents
   - Biodiversity impacts

2. LEADERSHIP & GOVERNANCE
   - Communications and engagement
   - Community development
   - Impact from facilities
   - Customer satisfaction
   - Customer health and safety
   - Disclosure and labeling
   - Marketing and ethical advertising
   - Access to services
   - Customer privacy
   - New markets

3. BUSINESS MODEL & INNOVATION
   - Diversity and equal opportunity
   - Training and development
   - Recruitment and retention
   - Compensation and benefits
   - Labor relations and union practices
   - Employee health, safety and wellness
   - Child and forced labor

4. SOCIAL CAPITAL
   - Long term viability of core business
   - Accounting for externalities
   - Research, development and innovation
   - Product societal value
   - Product life cycle use impact
   - Packaging
   - Product pricing
   - Product quality and safety

5. HUMAN CAPITAL
   - Regulatory and legal challenges
   - Policies, standards, codes of conduct
   - Business ethics and competitive behavior
   - Shareholder engagement
   - Board structure and independence
   - Executive compensation
   - Lobbying and political contributions
   - Raw material demand
   - Supply chain standards and selection
   - Supply chain engagement & transparency

Source: The Sustainability Accounting Standard Board, SASB Materiality Map.
### Financials

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<td><strong>Social Capital</strong></td>
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<td>Data security and customer privacy</td>
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<td>Fair disclosure and labeling</td>
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<td>Fair marketing and advertising</td>
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</table>
## Human Capital
- Labor relations
- Fair labor practices
- Employee health, safety and wellbeing
- Diversity and inclusion
- Compensation and benefits
- Recruitment, development and retention

## Business Model and Innovation
- Lifecycle impacts of products and services
- Environmental, social impacts on core assets and operations
- Product packaging
- Product quality and safety

## Leadership and Governance
- Systemic risk management
- Accident and safety management
- Business ethics and transparency of payments
- Competitive behavior
- Regulatory capture and political influence
- Materials sourcing
- Supply chain management

Source: The Sustainability Accounting Standard Board, SASB Materiality Map.
MATERIALITY

Nestlé materiality matrix

Source: Nestle, Creating Shared Value Report 2015
ประเด็นด้านการพัฒนาอย่างยั่งยืนของเอสซีจี
## Materiality Test

### Materiality

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<tr>
<th>Dimension</th>
<th>Issue</th>
<th>Impact to Company</th>
<th>Impact to Stakeholders</th>
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