



Lucas County Sustainability  
Commission  
Sustainability and Green  
Purchasing

Achieving a 21st Century Green  
and Sustainable Supply Chain

Parker Enterprises  
July 15, 2011

# Cause of Sustainable Supply Chain Failures

- **Market/Marketing**
  - Misunderstanding of customer needs
  - Poor positioning, competitive response
- **Financial**
  - Low return on investment
- **Timing**
  - Late or Too Early to the Market
- **Technical**
  - Bad Design, Product did not work
- **Organizational**
  - Culture, Lack of Support
- **Environmental**
  - 2 ➤ Macro economic factors

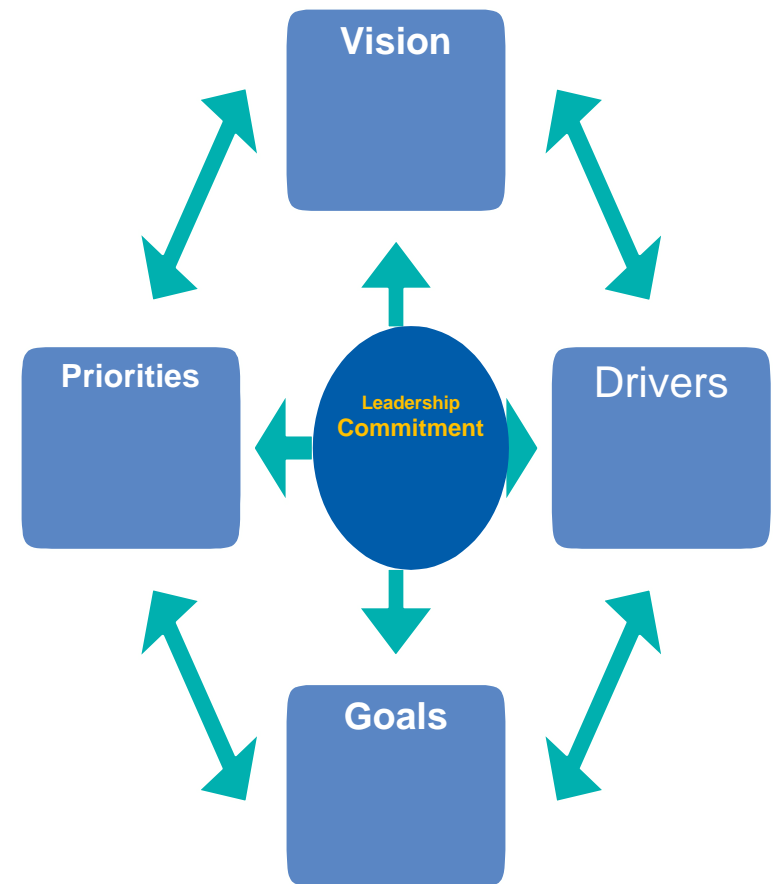
# Strategic Alignment

Leading companies consistently define environmental sustainability as a top-five strategic priority.

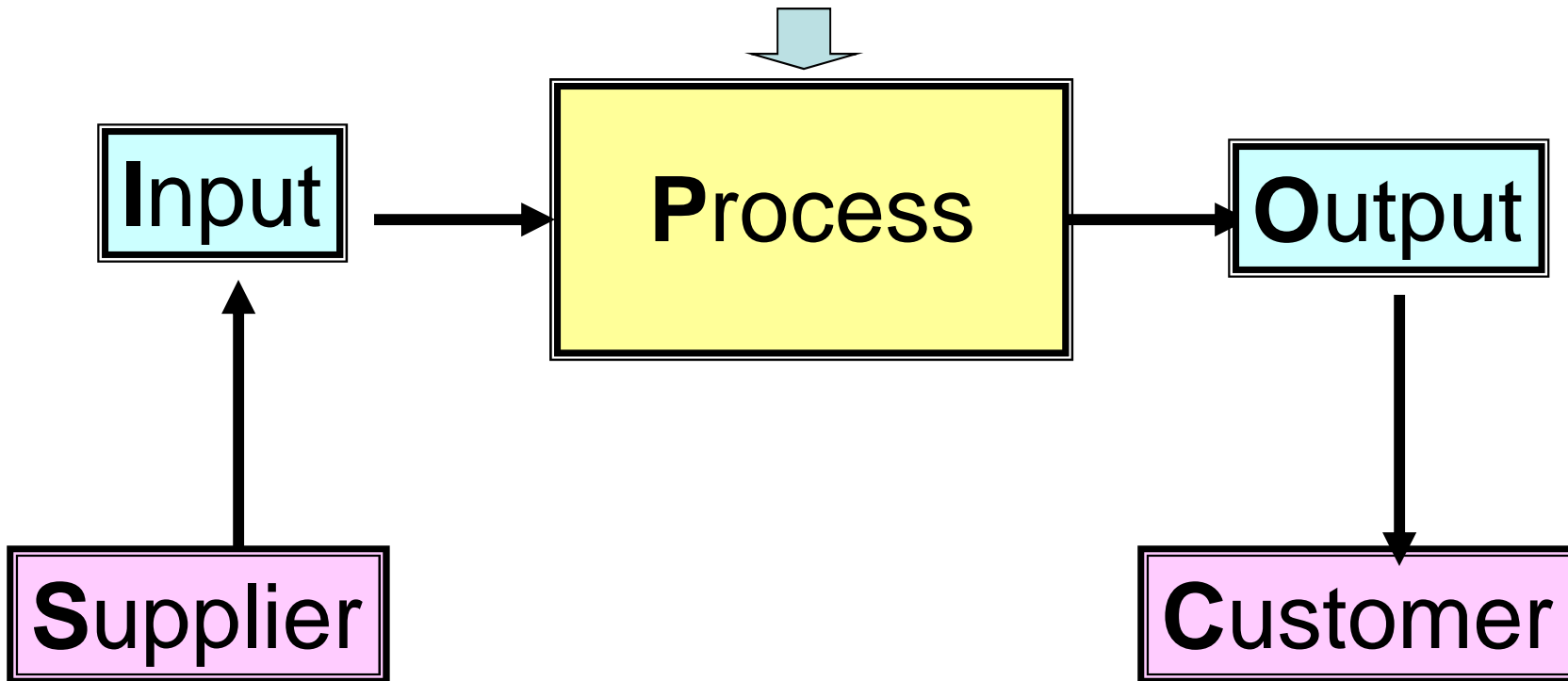
In all cases, the CEO is directly involved in setting the green priorities and vision.

Additionally, these companies implement environmental sustainability into their brands, strategy, and operations.

They view this sustainability as an integral part of the overall company mission statement; it is woven into the very fabric of the company.



# SIPOC



Understanding the entire process is key to driving change

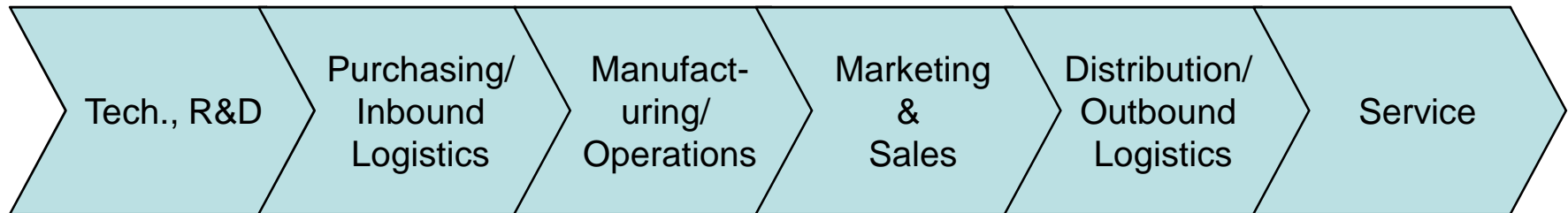
# Green Purchasing Business Impact



## Business



**OR**



*Does your business have a similar model?*

# Sustainable Supply Chain



*To Exceed Customer, Stakeholder  
& Shareholder Expectations:*

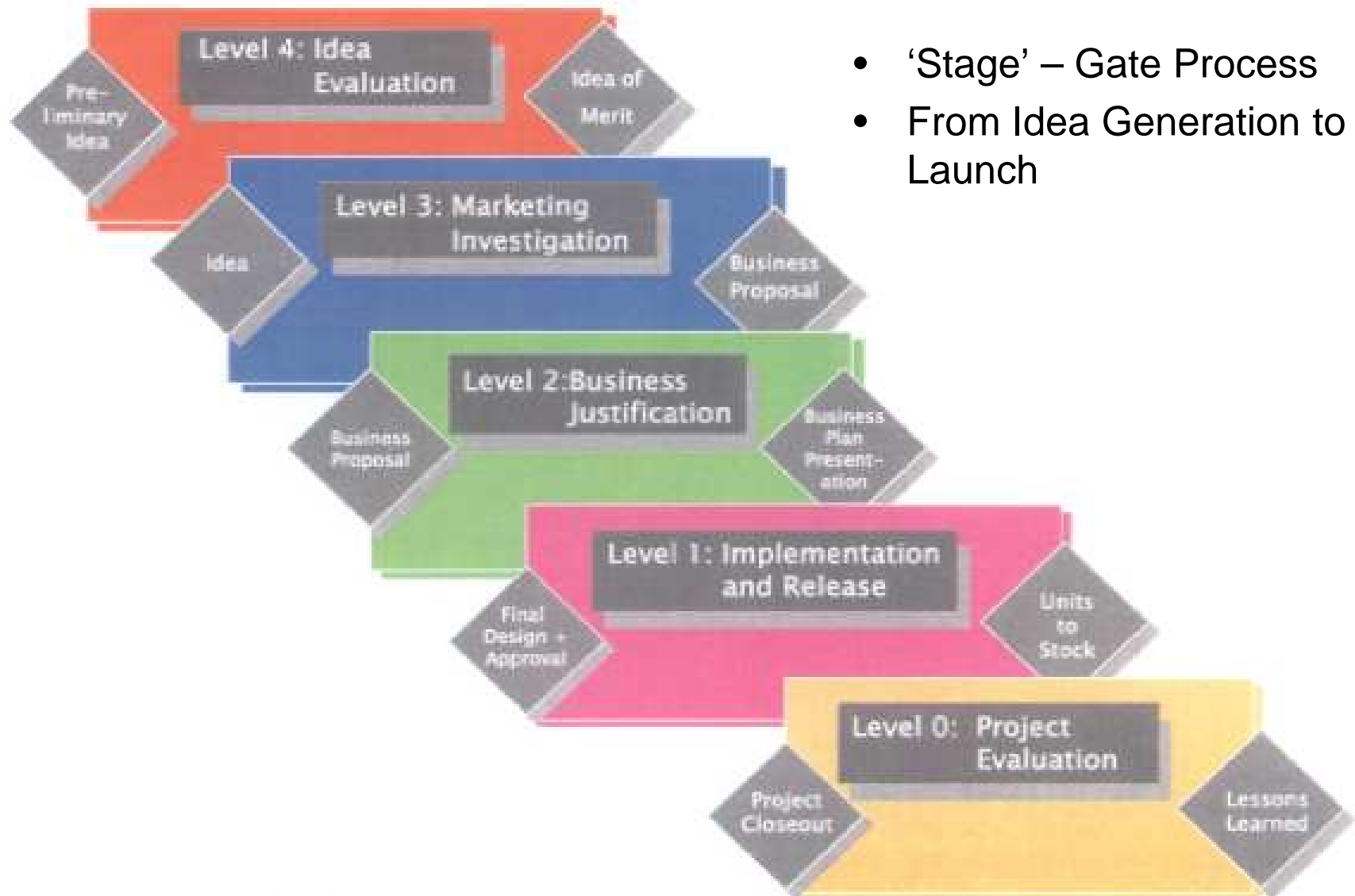


*We must Re-think it from  
End to End!!!*

## Sustainable Supply Chain begins with:

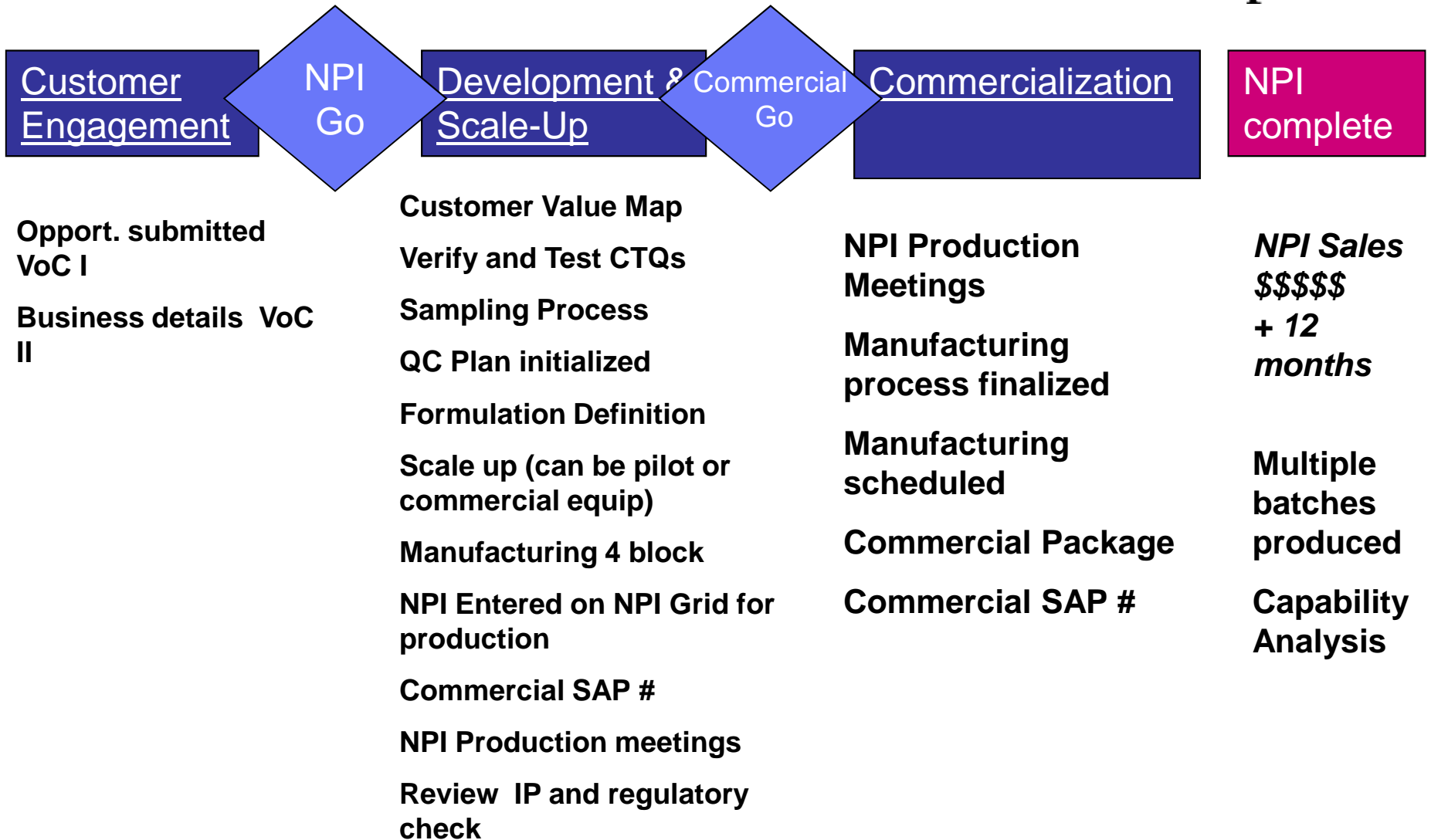
- Leading sustainability as a core strategic value
- Robust Sustainable, R&D and NPD Process
- Connect the dots between operations
- Re-Invent your manufacturing processes
- Examine your extended supply chain
  - Work with your suppliers – suppliers
  - Customers - customers
- Link with your competitors
- Look beyond your enterprises' network
- Develop metrics that drive 'real' sustainability

# What is a NPD Gating Process?



- ‘Stage’ – Gate Process
- From Idea Generation to Launch

# Example NPD Process



← **Functional Scorecard** *Drives internal needs* →

# What is green Lean Six Sigma?



How do you get productivity,  
quality and speed?

## Lean Six Sigma

### Focus of Six Sigma

- ▶ Variation

### Basics

- ▶ Process
- ▶ Correlation
- ▶ Discipline (DMAIC)
- ▶ Data

### Examples of Tools Used

- ▶ QFD
- ▶ Run Charts
- ▶ Pareto
- ▶ Regression

### Focus of Lean

- ▶ Waste

### Basics

- ▶ Customer value
- ▶ Process
- ▶ Flow
- ▶ Pull
- ▶ Perfection

### Examples of Tools Used

- ▶ Simulation
- ▶ Value stream maps
- ▶ Standard work
- ▶ Visual management
- ▶ Takt time

**A foundation for driving sustainable supply chain**

# Critical Success Factors



Findings indicate that leading companies adopt a structured approach to implementing a long-term greening program.

Typically, leading companies focus on critical success factors that include:

1. **Aligning greening and business strategies** – They gain commitment from the highest levels of leadership, who understand the drivers, create an “environmental sustainability vision” and set aggressive goals and priorities that meet both greening and business objectives.
2. **Integrating greening into operations and processes across the value chain** – They develop an “as-is” understanding of current environmental sustainability performance, take a full lifecycle view of the value chain, and engage all levels of the organization to institute metrics, policies and procedures to execute green programs.
3. **Structuring new collaborations** – They structure non-traditional collaborations with suppliers, NGOs, consumers, shareholders, scientific/academic communities and regulatory bodies to develop new technologies and innovative business models that support a green agenda.
4. **Setting up a robust governance mechanism that is supported by the right infrastructure** – They invest in dedicated resources, centrally track programs, and share best practices to accelerate future green program development and drive continual improvement.



Q&A

Dialogue