



Building a Culture of Sustainability

MEDQ ENHANCE WORKSHOP
JACKSON, MS. APRIL 9, 2019

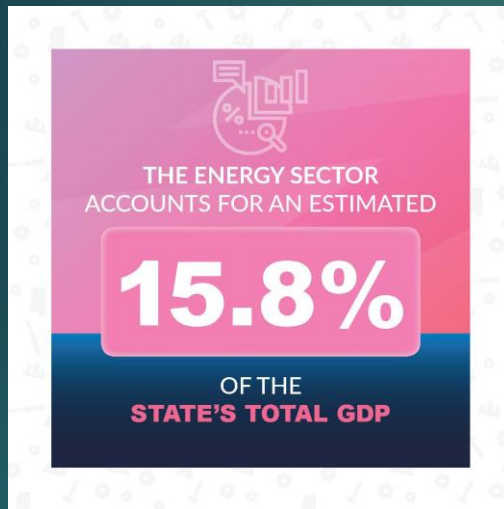
SUMESH ARORA, PH.D.

MDA Energy & Natural Resources Division

STATE ENERGY OFFICE



Energy Sector in Mississippi



\$17.7 Billion impact

167,000+ jobs (14%)



(Calculated by NSPARC with REMI model)



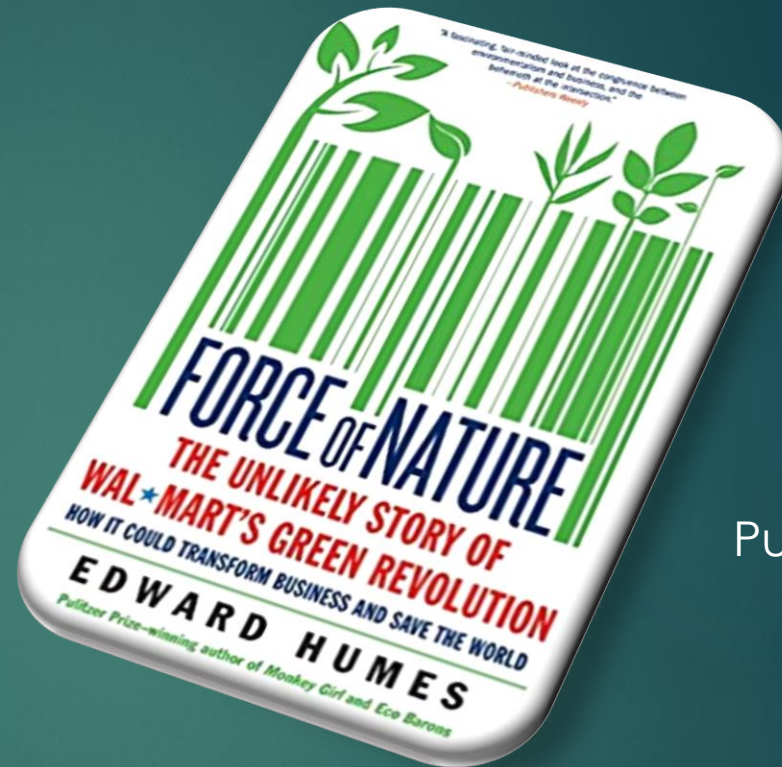
Which companies comes to mind?

- ▶ Whole Foods
- ▶ Starbucks
- ▶ Tesla
- ▶ Patagonia

Sustainability

Think Again...

- ▶ Unilever
- ▶ Walmart
- ▶ IKEA
- ▶ Tesla
- ▶ Nestlé
- ▶ Danone
- ▶ Apple



Published
2011

GlobeScan-SustainAbility Leaders Survey

Survey Methodology: 729 qualified sustainability experts completed the online questionnaire

<http://sustainability.com/>

World's Most Sustainable Companies, 2018

1	Dassault Systemes	France	Software
2	Neste	Finland	Oil, Gas & Consumable Fuels
3	Valeo	France	Auto Components
4	Ucb	Belgium	Pharmaceuticals
5	Outotec	Finland	Construction & Engineering
6	Amundi	France	Capital Markets
7	Cisco Systems	United States	Communications Equipment
8	Autodesk	United States	Software
9	Siemens	Germany	Industrial Conglomerates
10	Samsung SDI	South Korea	Diversified Electronic Equipment



Corporate Knights Report

Based on up to 21 key performance indicators (KPIs) covering resource management, employee management, financial management, clean revenue and supplier performance.

www.global100.org

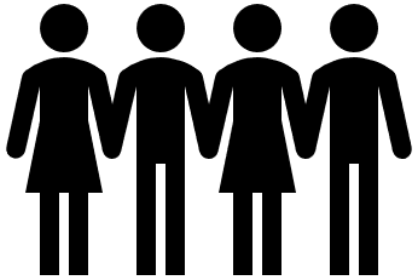
U.S. Leaders in Clean Capitalism

Rank	Company	Sector
7	Cisco Systems	Communications Equipment
8	Autodesk	Software
13	Merck	Pharmaceuticals
20	Allergan	Pharmaceuticals
23	McCormick	Food Products
26	Intel	Semiconductors & Semicor
27	Itron	Electronic Equipment, Instru
37	Eli Lilly	Pharmaceuticals
42	Analog Devices	Semiconductors & Semicor
43	Applied Materials	Semiconductors & Semicor
48	Ingersoll-Rand	Machinery
59	NVIDIA	Semiconductors & Semicor
69	Texas Instruments	Semiconductors & Semicor
75	MetLife	Insurance
77	HP	Technology Hardware, Stor
79	Hewlett Packard Enterprise	Technology Hardware, Stor
81	General Electric	Industrial Conglomerates
92	Johnson & Johnson	Pharmaceuticals



THE
GLOBAL
100:

www.global100.org



TRIPLE BOTTOM LINE

PEOPLE - PROFITS - PLANET

LOHAS Consumers

(Lifestyle of Health and Sustainability)

More than 25% of US shoppers

More than \$290 billion in sales

*Incredible opportunity
for specialty brands*

Tend to buy based on values,
rather than price

Caution: Loyalty isn't something brands can earn overnight

<https://blog.ethos-marketing.com/blog/reach-market-to-lohas>

Defining Corporate Leadership

Key characteristics recognized by the 2018
GlobeScan-SustainAbility Leaders Survey:

- ▶ *sustainability values*
- ▶ *making sustainability part of the core business model and*
- ▶ *committed executive leadership*

Five Key Leadership Attributes

- ▶ Purpose
- ▶ Plan
- ▶ Culture
- ▶ Collaboration
- ▶ Advocacy

People are the Most Important Factor for Approaching Sustainability

- ▶ *Just a few managers/engineers can't be everywhere and do everything.*
- ▶ Varying levels of training and education for all employees will inspire & motivate everyone to become excited **about** sustainability and saving \$\$\$\$

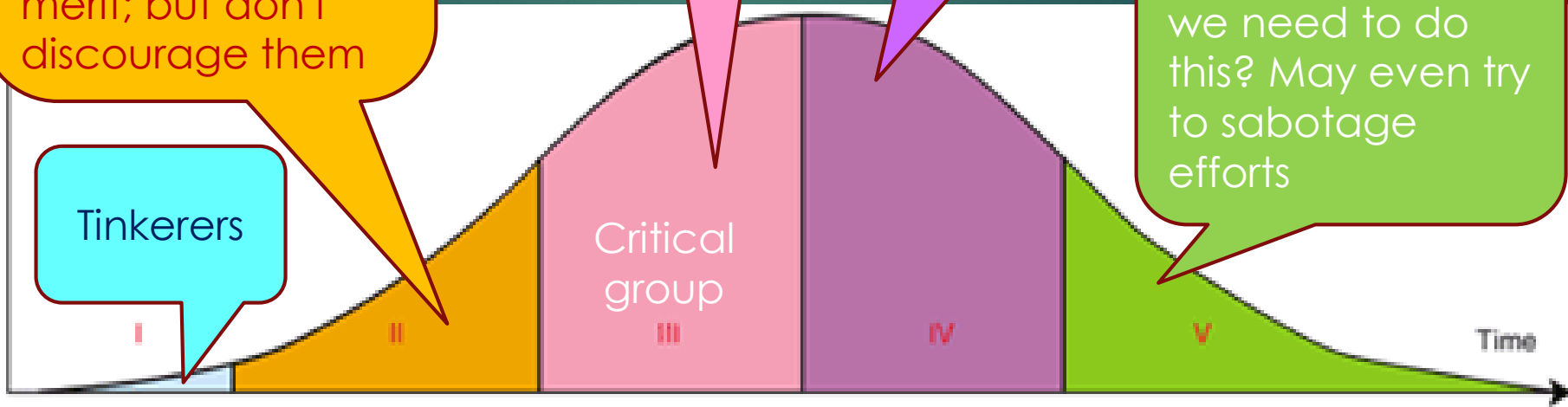
Will **actively look** for projects; may even have to temper their excitement for projects that don't have economic merit; but don't discourage them

Tinkerers

Will **come along** and eventually be example setters for others

Barely excited; skeptical, but will eventually get on board; may be barrier to efforts in the short term

Resentful: Why do we need to do this? May even try to sabotage efforts

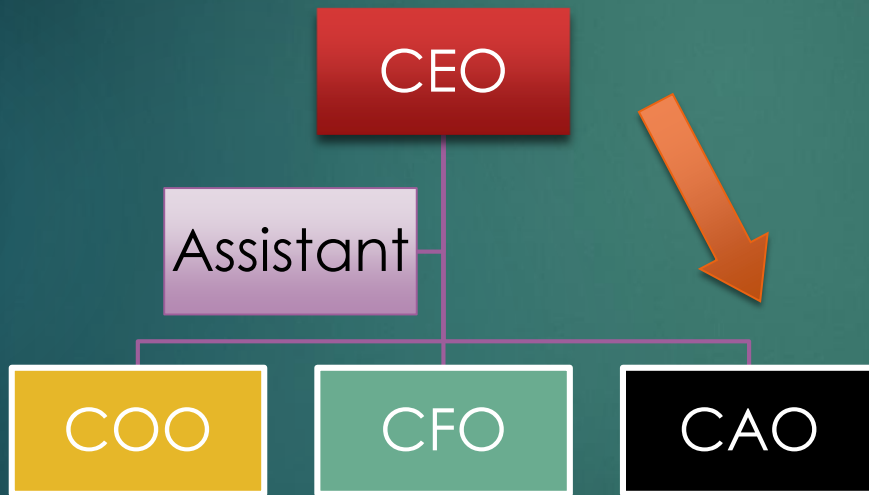


Category	I. Innovators	II. Early adopters	III. Early majority	IV. Late majority	V. Laggards
Percentage	2.5%	13.5%	34%	34%	16%

Who will get energized?

Who Will Energize Others?

- ▶ The **message** is important
- ▶ The **messenger** is just as important



7 + 1 Wastes of Lean Manufacturing

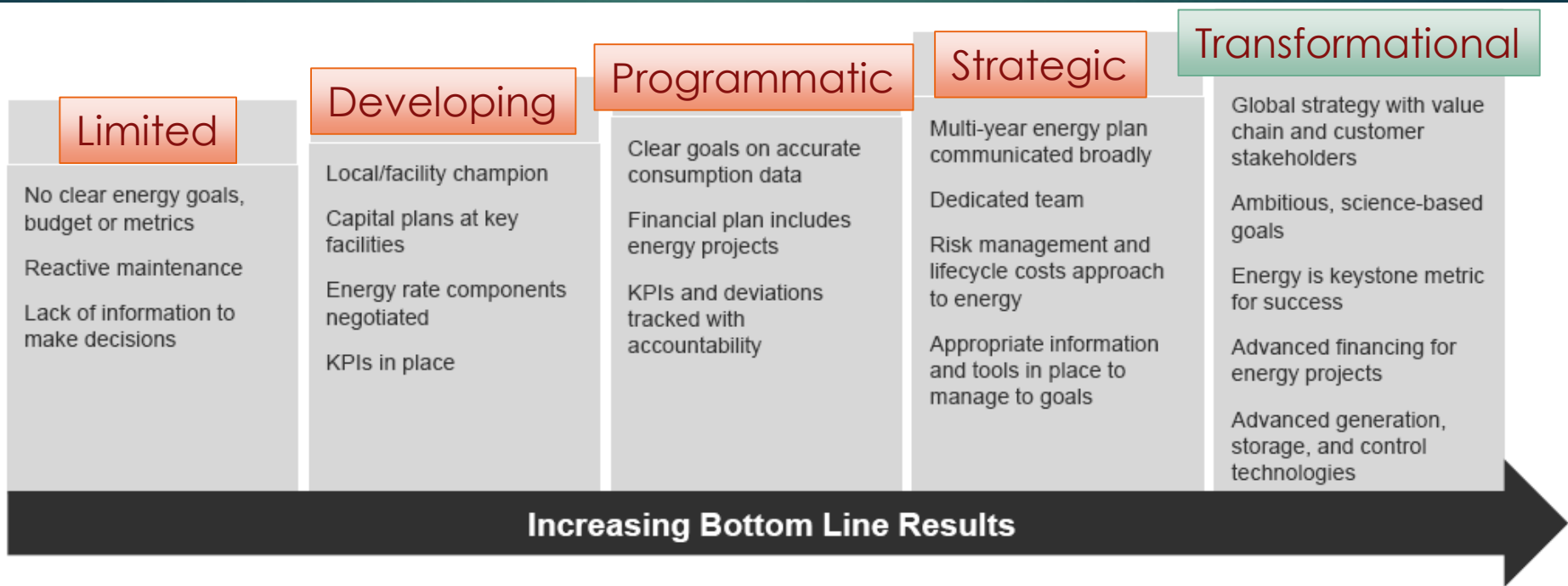
1. Overproduction
2. Inventory
3. Waiting
4. Motion
5. Transport
6. Defects/Re-working
7. Over-Processing
8. **Unused Employee Potential/Genius**

Look at sustainability holistically

8 Wastes of Environmental

1. Solid Waste Reduction
2. Air Emission Reduction
3. Material Optimization
4. Toxic Material Reduction or Substitution
5. Hazardous Waste Reduction
6. Energy Efficiency
7. Liquid Waste
8. Packaging Waste

Energy Management Maturity



Key Question: What is right for your enterprise?

Implementing Sustainability Projects

- ▶ For each project, **designate** facilitator/mentor who provides the knowledge base and new perspectives
- ▶ May need an “outside set of eyes”
- ▶ **Empower** the facilitator/mentor to assist and support your teams
- ▶ Know how you are going to **measure** your ROI or payback
- ▶ Recognize and **Celebrate**

Teamwork Leads to Success

- ▶ Each sustainability success occurs by doing a relevant project usually in a team format facilitated/guided by a mentor



MDA Energy & Natural Resources Division

Programs for Energy Efficiency:

- Low Interest loans
- Tax-Exempt Leases (public entities)
- Industrial MIEEP grants



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