

Building a Culture of Sustainability



E3: ECONOMY - ENERGY - ENVIRONMENT

A SUSTAINABLE GROWTH STRATEGY

Sustainability Workshop

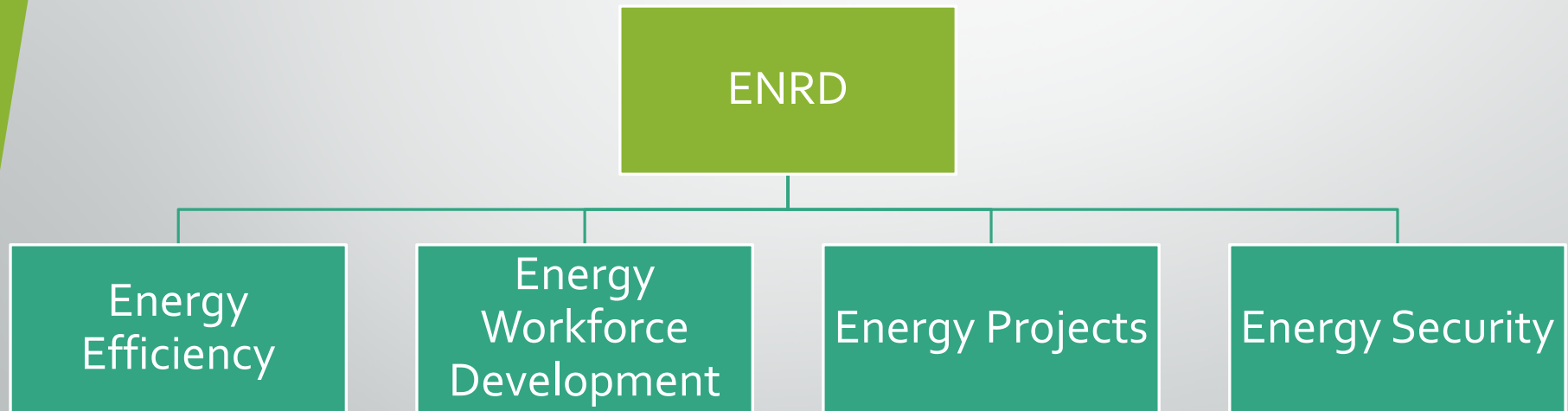
September 28, 2018

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STATE ENERGY OFFICE





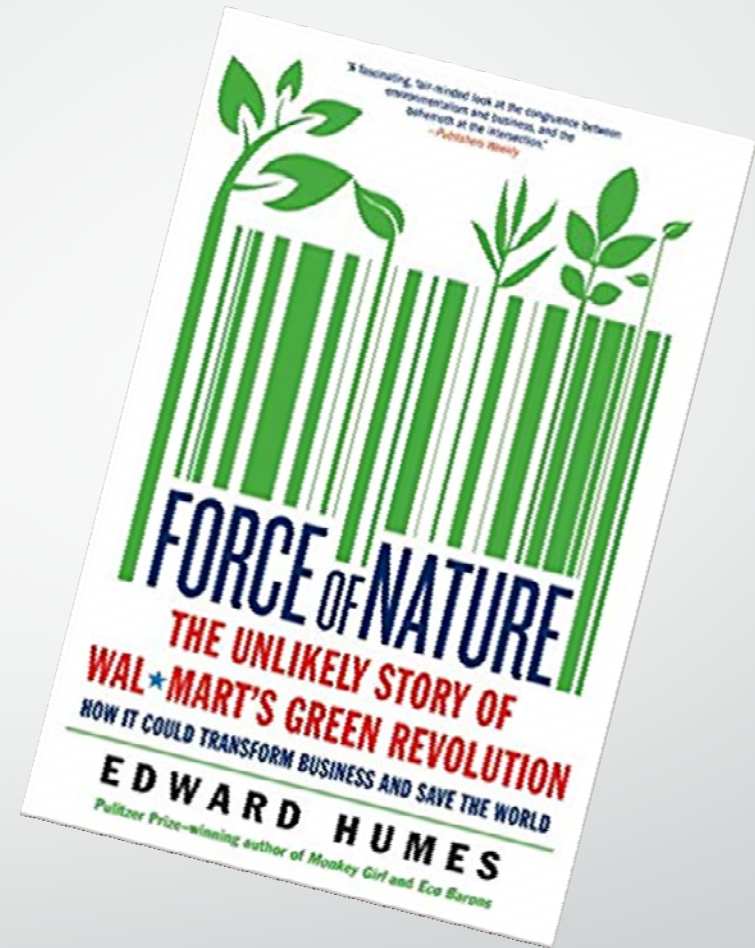
Which company comes to mind?

- Whole Foods
- Starbucks
- Tesla

Sustainability

Think Again...

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



GlobeScan-SustainAbility Leaders Survey

<http://sustainability.com/our-work/reports/the-2018-sustainability-leaders/>

TRIPLE BOTTOM LINE



PEOPLE - PROFITS - PLANET



Integrating:

- *Sustainability values*
- *Making sustainability part of the core business model*
- *Committed executive leadership*

are the key characteristics recognized by expert respondents for defining corporate leadership.

GlobeScan-SustainAbility Leaders Survey



Five Key Leadership Attributes

- Purpose
- Plan
- Culture
- Collaboration
- Advocacy

GlobeScan-SustainAbility Leaders Survey



“I know it when I see it”

United States Supreme Court Justice Potter Stewart, 1964,
describing his threshold test for obscenity.

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

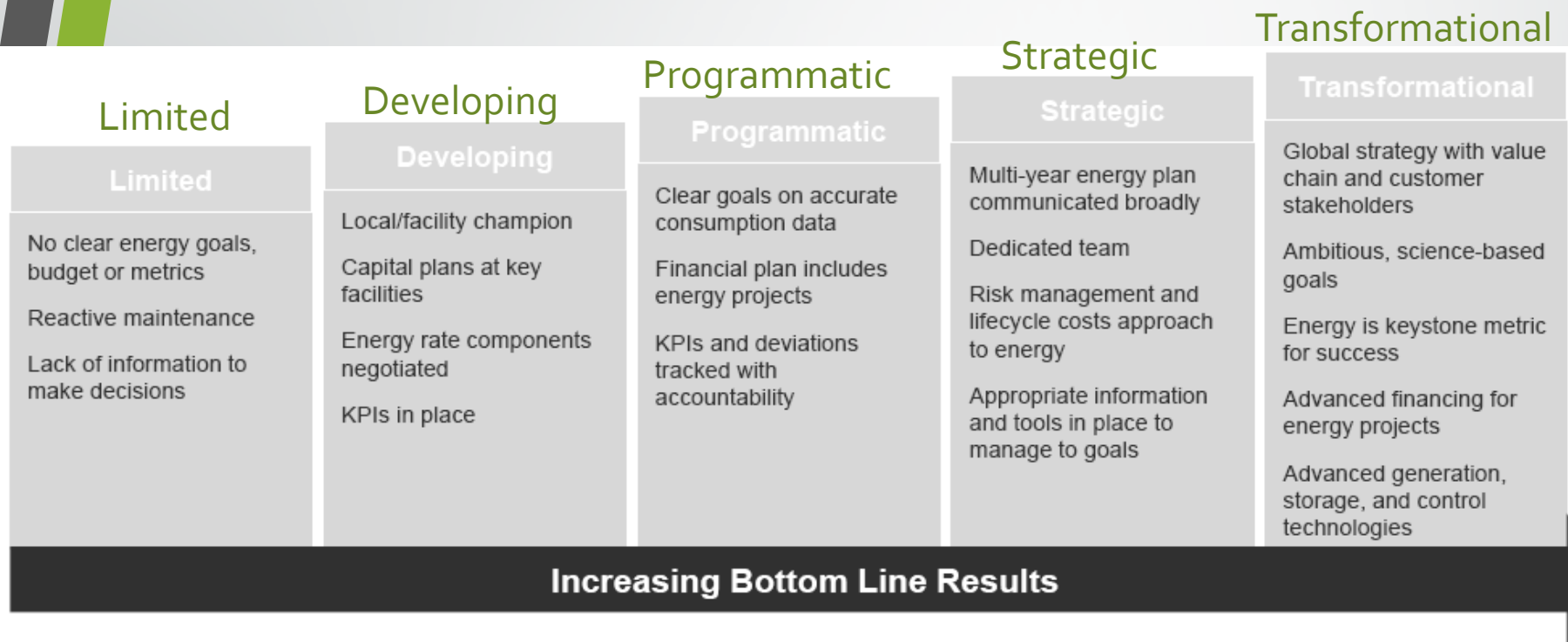
8 Wastes of Environmental

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

<http://www.leanovations.com/id75.html>



Energy Management Maturity



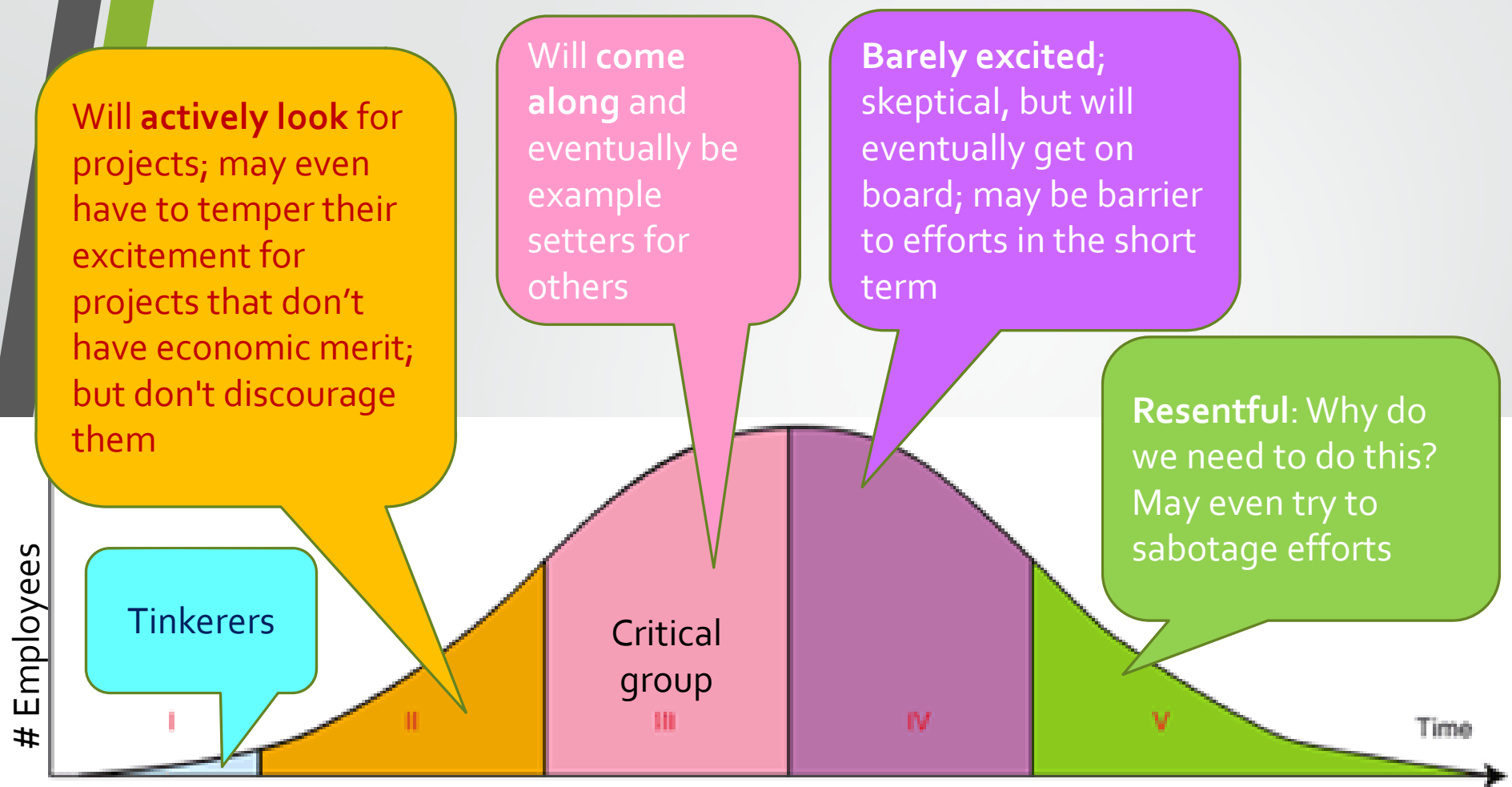
Key Question: What is right for your enterprise?

Courtesy: EnerNoc



People are the Most Important Factor for Saving Energy

- People are the most important factor for saving energy because just a few *energy managers/engineers can't be everywhere and do everything.*
- Varying levels of energy training for all employees will inspire & motivate everyone to become excited about saving energy and \$\$\$



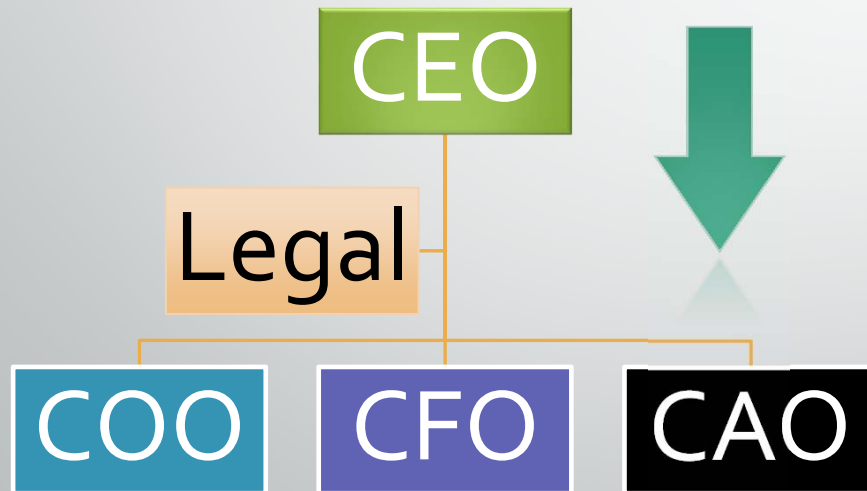
Category	I. Innovators	II. Early adopters	III. Early majority	IV. Late majority	V. Laggards
Percentage	2.5%	13.5%	34%	34%	16%

Who will get energized?

© Sumesh Arora

Who Will Energize Others?

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





Implementing Energy Projects

- For each project, an **energy facilitator/mentor** provides energy-saving knowledge and new perspectives as an “outside set of eyes”
- When you have an energy facilitator/mentor to assist your energy teams, you will get the biggest successes for energy savings, \$ payback, etc.

Courtesy: Dr. Joe Davis, Practical Energy training

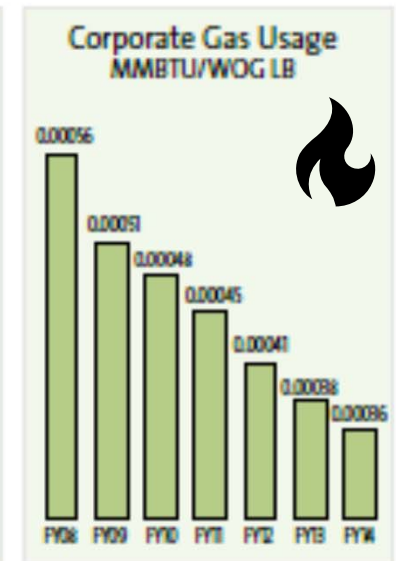
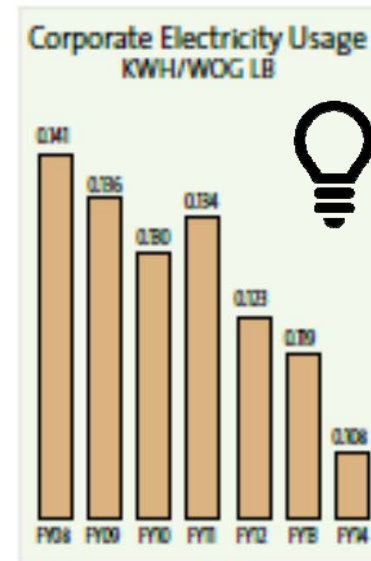
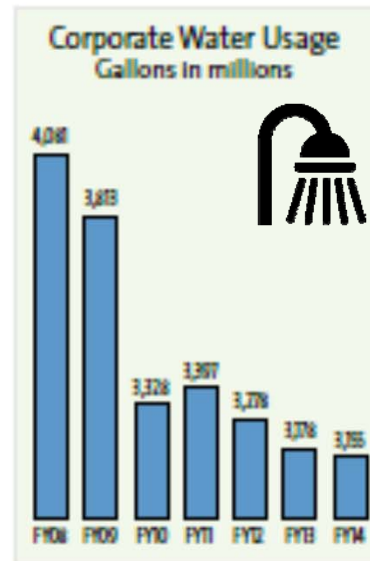
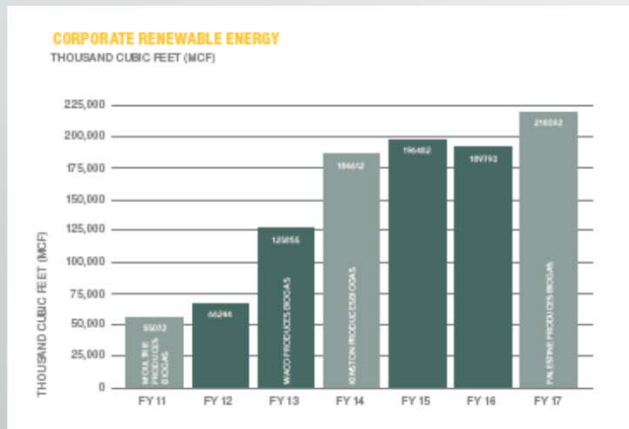
Corporate Energy Management

- Integrate** energy management into the fabric of your company
- Elevate** Business performance using energy intelligence
- Capitalize** on new technologies and market choices
- Promote** your efforts and celebrate success

Courtesy: EnerNoc

Sanderson Farms

Corporate Responsibility Reports



* includes processing, feed mills, & hatcheries

The process flow diagram illustrates the biogas production cycle. It begins with inputs: 'Fresh Water Make-up Input' (represented by a trapezoid) and 'Poultry Manure Waste Input' (represented by a trapezoid). These feed into a 'Mixing Tank 2 x 30 kgal'. A 'Recycle Liquid' stream also enters the mixing tank from the right. The output of the mixing tank goes to a 'Digester Tank 2 x 750 kgal'. From the digester, the flow goes to a 'Transfer Tank 1 x 30 kgal'. The transfer tank has two outputs: one goes to a 'Heat Output' unit (represented by a circle), and the other goes to a 'Solids Drying' unit (represented by a rectangle). The 'Solids Drying' unit has two outputs: one goes to a 'Solid Fertilizer Output' (represented by a circle), and the other goes to a 'Liquid Return to Bladder' unit (represented by a circle). The 'Liquid Return to Bladder' unit feeds back into the 'Mixing Tank' as 'Recycle Liquid'. The 'Heat Output' unit feeds back into the 'Digester Tank' as 'Heat Input' (represented by a circle). The 'Solid Fertilizer Output' unit feeds back into the 'Mixing Tank' as 'Solid Fertilizer Input' (represented by a circle).

The photograph shows the physical facility, featuring a large blue cylindrical digester tank, a smaller blue cylindrical transfer tank, and a large blue rectangular storage tank. The tanks are situated in an open field with trees in the background.



Teamwork Leads to Success

Each sustainability success occurs by doing a relevant project usually in a team format facilitated/guided by a mentor: is that you?





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