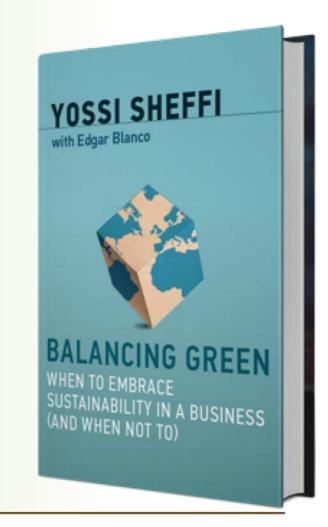


Going Green is not Black and White

Innovations in Management March 6, 2019

Yossi Sheffi

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Main Points

- It's all about the supply chain
- Life Cycle Assessment
- The real "inconvenient truth" "say" vs. "pay"
- Why initiate some sustainability projects (even if you don't believe in the efficacy or the cost/benefit)?
- "Make believe" sustainability
- It's not "planet vs. profit"
- Government Role





It's All About the Supply Chain

- 2/3 carbon emission of most companies is in their upstream supply chain
- For some products, most of the emissions are in the use phase (downstream)
- So looking just at a company's environmental impacts is misleading.











Use-Phase Impact & LCA

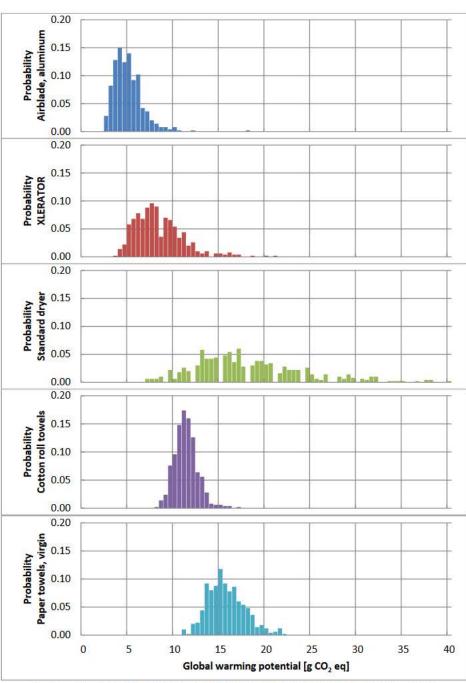


- What is "dry"?
- Impact per dry hands
- Number of dry hands in the life
- Supply chain impact
- Sensitivity analysis to parameters





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Rigorous Life Cycle Assessment (LCA)

TESCO

- 1. Too slow and expensive (Tesco 2001)
- 2. With full effort only 125 products/year
- 3. Needed seven centuries for 90,000 SKUs
- 4. Walmart also started and withdrew









The Limit of Influence

Suppliers:

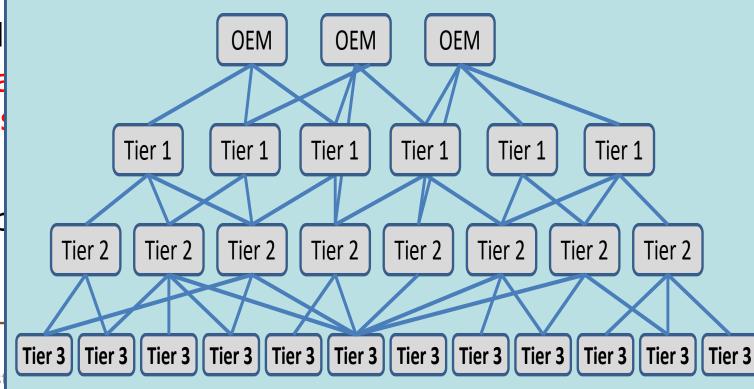
- Not knowing who deep tier suppliers are
- No commercial relations with deep tier suppliers

Smaller volume with deep tier sunnliers

- Commodities lack of abil
- Result: it became clear the visibility into the deep tiers

Customers:

No easy way to influence t

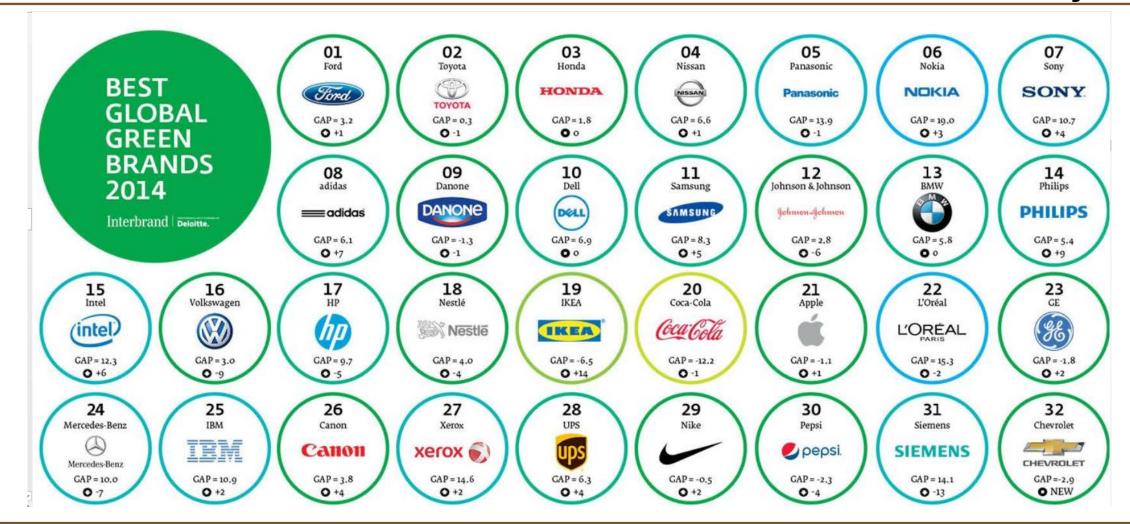






Consumers "Say" But Don't "Pay"

The FORD story 2014









Consumers "Say" But Don't "Pay"

The FORD story 2018



Plan on snagging that new Ford Fusion sooner rather than later..

FORD TO STOP SELLING SEDANS IN NORTH AMERICA IN FACE OF UNSTOPPABLE CROSSOVER ONSLAUGHT

Fiesta, Fusion, Taurus and non-hatch Focuses will disappear from new car lots by 2022; blame crossovers, SUVs and pickups









What Consumers Say







Allagash employees Salim Raal, left, and Brendan McKay stack by house strain of Brettanomyces yeast. The Maine brewery recently Devek Devis/Portland Press Herald via Getty Images

MIT Center for Transportation & Logistics



66% of consumers sustainable goods, I

by Joshua | Jun 27, 2016 | Media | O co



 66% of survey respondents sustainable goods, up from



Technology

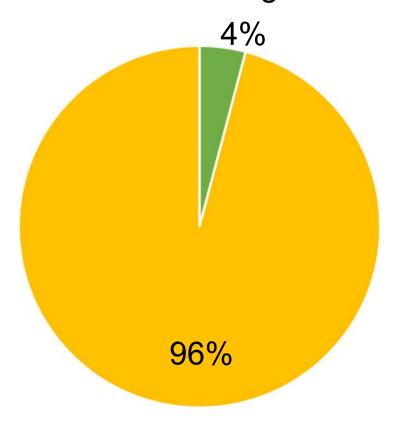


Really ???





Percent Choosing Green









The Akerlof Effect

• What happened when consumers for used cars cannot distinguish between good cars and "lemon cars"?



- They will not pay extra for sellers arguing that their cars are good. They will only pay for the "average" quality
- Sellers of high quality cars will leave the market
- Average quality is eroded
- The market is damaged

This happens with CSR. If consumers cannot judge, they will not pay for responsible products







Three Basic Business Reasons To Act (Even for skeptics)

- 1. Eco-efficiency many sustainability actions reduce cost (or improve service) and thus should be done anyway
 - Example: reduce energy consumption (Staples with truck engine regulators)
- 2. Eco risk-mitigation attacks by NGOs, the media, and even consumer groups can reduce sales and stock price
 - Example: Nike boycott
- 3. Eco-segmentation/hedging Develop an offering for the "green" market in order to understand it, know demand patterns, master technology, know suppliers "just-in-case" the market will change (regulations, demand, etc.)
 - Example: Clorox "Green Works" ("an experiment")







What do Companies do?

Most: must pass the standard hurdle rate



• Some: use a lower hurdle rate for sustainability projects **STAPLES**



• (Very) few: will do it regardless of cost

patagonia

• (Still fewer): Benefit corporation









The "Pretend" Sustainability

McDonald's Is Phasing O Straws

Scientists Underestimated The replacement is way more enviror How Bad Cow Farts Are

 \equiv Forbes



by MADISON FLAGER APR 4, 2018





TWEET THIS

Farts are funny. Global warming is not.

Animal farts and poop are major contributors to global warming. It turns out we might have been underestimating just how much.





What Can Your Water

Beautiful's "I Want to Be" campaign. See

tiont to

WATCH NOW

Have a Question?



As innovators, Niagara is always looking for ways to improve through technological advancements and processes that help us reduce our impact on the environment. Our Eco-Air



Eco-Air Bottle

In the past 15 years, Nlagara has reduced the amount of plastic in our Eco-Air® Bottle by over 60%*. Our bottle is not only lightweight but also 100% recyclable**. Because of the duced weight in our plastic, we are able to:





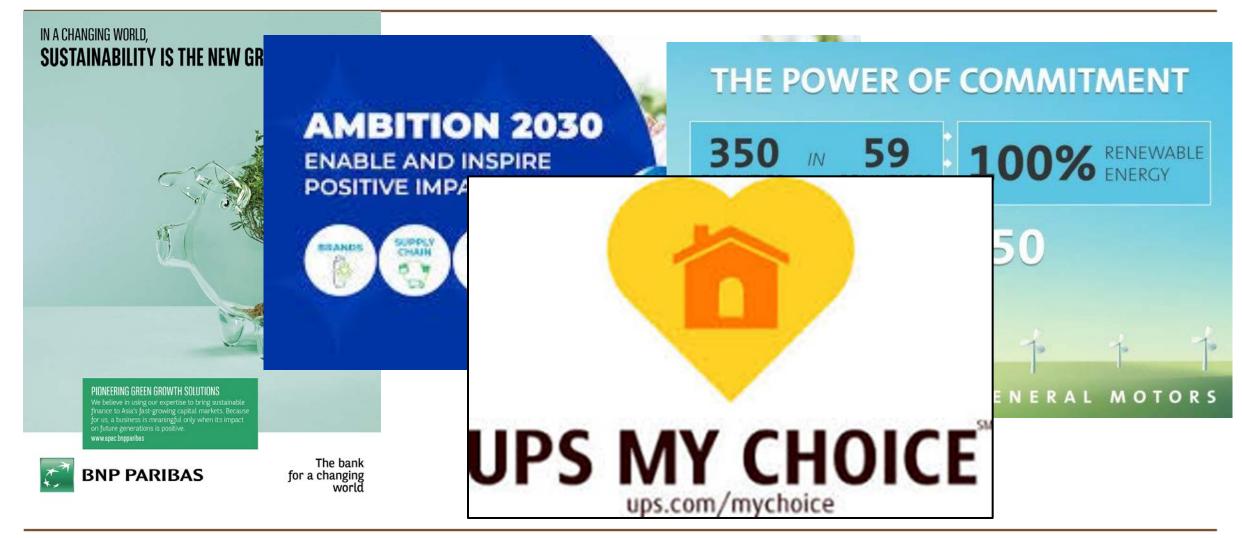
the reduction of plastic o longer be using plastic ge will be minimised in all nd alternative sustainable e plastic straws or bottled ver for assistance.







The "Pretend" Sustainability









Is Government Regulations the Answer?

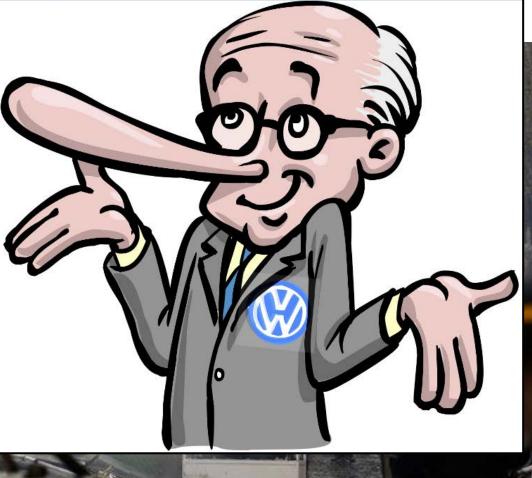




WASHINGTON (Reinformed the United Agreement in a docure-engaging if the ter









Australia has one of the high

Australia's Senate has vo

Part of The 2018 midterm elections, explained

Transportation & Logistics

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The Slogans



Planet vs. Profits





People vs. Planet



People vs. Profits









The Real Deal:



People vs. people



People who want a clean environment

People who want jobs and affordable stuff







And What About the "Others"? at different Poverty Line (USD Do Numbers inside bars ar ■ Below the poverty line Above the poverty line Source: World Bank Development Indicators







Massachusetts Institute of Technology

Questions?

