

livestock's long shadow

environmental issues and options

Livestock = 18% of anthropogenic GHG
US: Livestock = 3.4% (EPA, 2009)

"A 16 oz T-bone is like a hummer on a plate. Switching to vegetarianism can shrink your carbon footprint by 1.5 tons of CO₂e per year" (Time, 2007)

Life cycle assessment was only conducted for livestock and NOT transportation



CONTINUOUS IMPROVEMENT

- Using fewer resources
- Beef is part of the solution to feeding the world
- Sustainability project

ZERO IMPACT IS NOT POSSIBLE

*Important to remember that there are tradeoffs and food production will result in an impact – **the goal is improvement over time***

WHAT DID WE FIND?

- Improved over time
 - 6 years we have improved 5% Environmental and social, 7%
- Innovations within the food system
 - Crop yields, machinery and irrigation technology, manure management, precision farming, and animal performance
 - Biogas capture, closed-loop water cooling systems, waste water recycling, and "right size" packaging

WHAT SURPRISED US?

- Vast definitions of sustainability
 - Lack of comments on GHGs, more on animal welfare, traceability, etc.
- Food waste

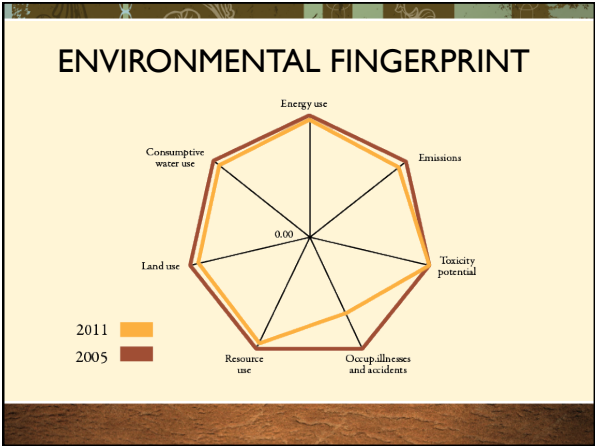
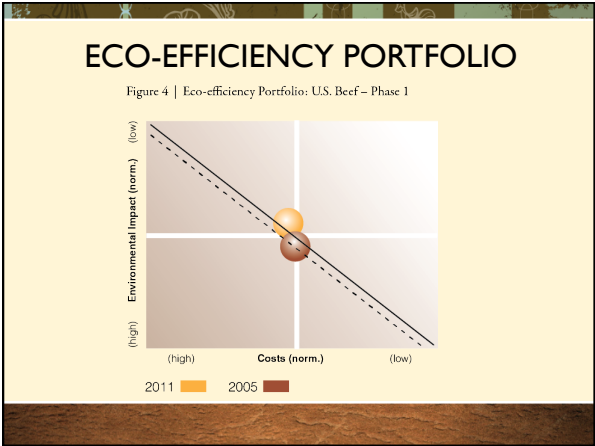
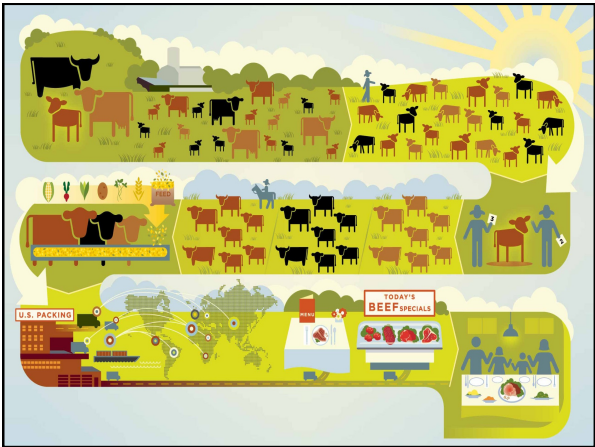
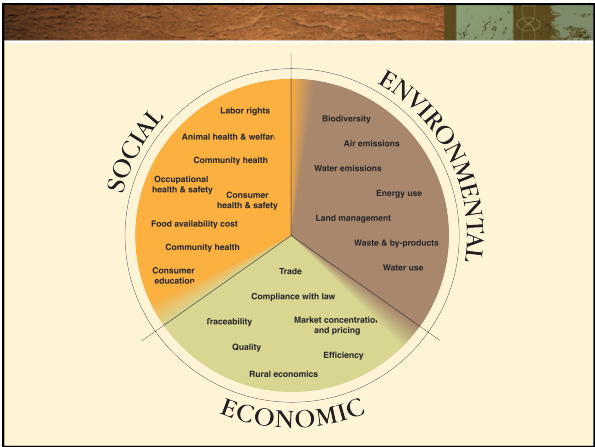
The United Nations estimates that 1/3 of the worlds food goes to waste.

FOOD FACTS

PERCENT OF FOOD PRODUCTS WASTED BY THE AVERAGE AMERICAN* (IN AND OUT OF HOMES)	
GRAIN	18%
DAIRY PRODUCTS	17%
VEGETABLES	20%
FRUIT	15%
SEAFOOD	25%
MEAT	33%

How to reduce food waste

- Plan ahead
- Buy what you need
- Store correctly
- Cook the right amount
- Eat it all or store leftovers for later
- Recycle what you can't eat







SUSTAINABILITY RESEARCH BENEFITS

- Tell our story
- Good science → baseline
- Supply chain focus in the right areas for improvement
- Effectively address the needs for more sustainable alternatives

KEEP IN MIND

- Continuous improvement over time
- A journey, NOT a destination
- Have a sustainable product today and we want a more sustainable product tomorrow

