

The Business Case for Sustainability

*MISSION: TO ADVANCE ECONOMIC PROSPERITY, HEALTH AND
QUALITY OF LIFE IN INDIANA AND BEYOND.*

ABOUT PURDUE MEP

Who we are: Purdue Manufacturing Extension Partnership (MEP)

- Division of Purdue Technical Assistance Program.
- Our staff consists of experts from a wide variety of business and manufacturing sectors.

What we do:

- We work exclusively with Indiana businesses to maximize performance through **streamlined processes, increased profitability, and increased competitiveness.**
- We offer public workshops, on-site training, and consulting services.
- Through these services Purdue MEP clients report **new sales, product and market growth, cost reductions, and job growth.**

SUSTAINABILITY

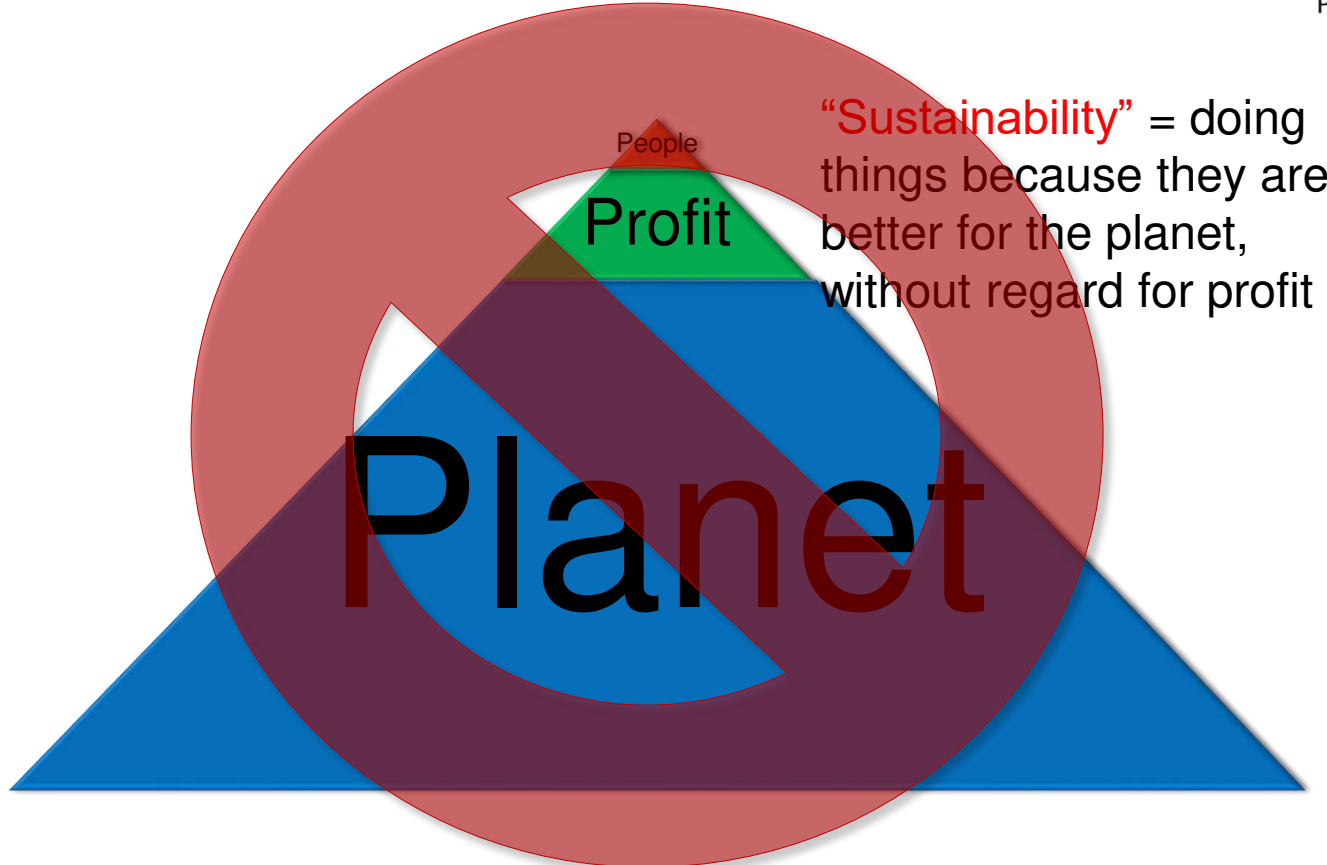


“Able to last or continue for a long time” – Merriam Webster

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.” – UN General Assembly, Report of the World Commission on Environment and Development

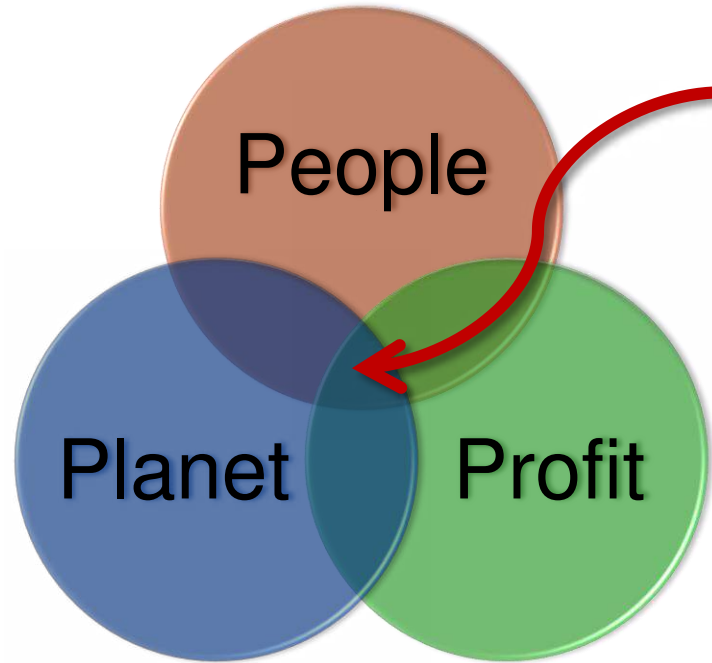
“In every deliberation, we must consider the impact on the seventh generation.” – The Constitution of the Iroquois Nations

PERCEPTION OF 'SUSTAINABILITY'



“Sustainability” = doing things because they are better for the planet, without regard for profit

ACTUAL SUSTAINABILITY



Sustainability =
delicate balance
of *all three* factors
in the **Triple
Bottom Line**

BIG HITTERS

In 2017, **94% of Fortune 200** companies have sustainability goals

Sustainability is becoming more critical for all companies to remain competitive

WHY ARE COMPANIES BECOMING MORE SUSTAINABLE?



Is your company trying to cope with increasing environmental regulation?



Are your customers demanding better environmental performance and data?



Do you want to lower your energy and materials costs?



Are you interested in producing and marketing greener products?

MORE PROFIT

Do companies that invest heavily in sustainability incur higher costs and become less profitable?

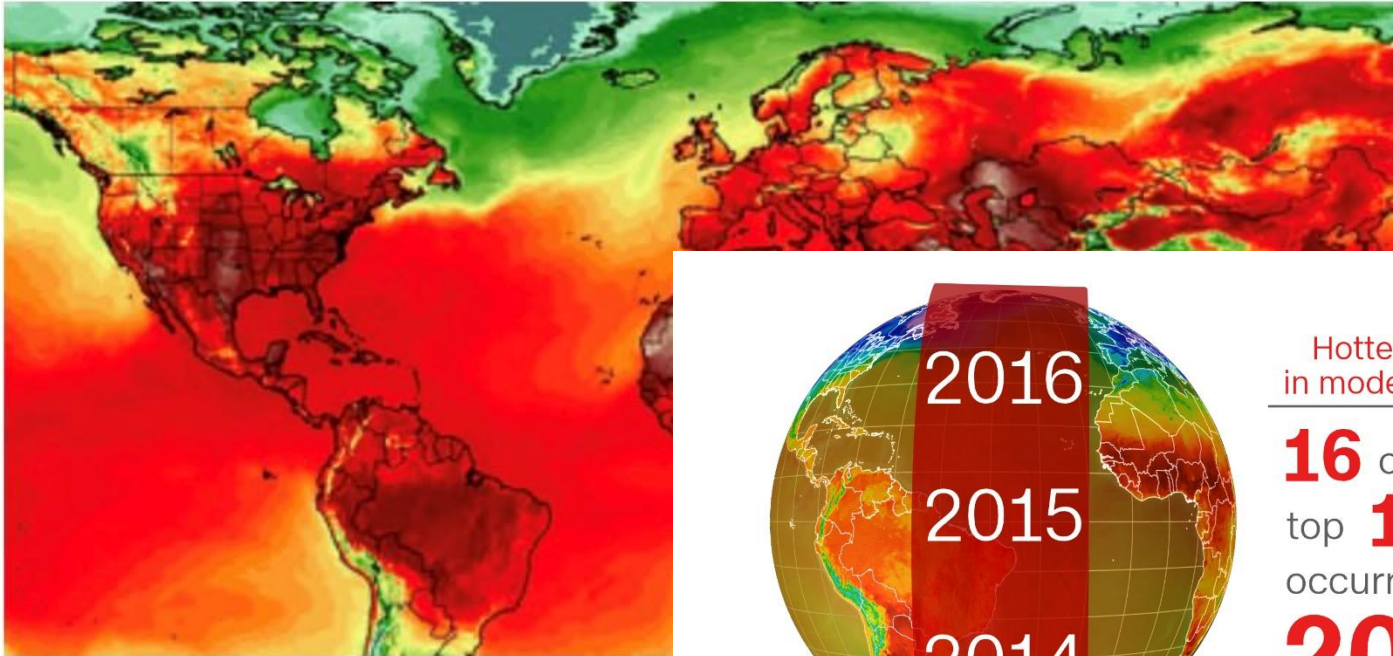
No. Global 100's cumulative return is **24 percentage points** higher than the ACWI benchmark.

INNOVATION

“Business as usual” is no longer good enough.

44% of business leaders developing urgent solutions cited **growth and new business** opportunities as reasons for tackling sustainability challenges

RISK MITIGATION



Hottest years
in modern record

16 of the
top **17** have
occurred since
2000

Top 5 Global Risks in Terms of Likelihood

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1st	Asset price collapse	Asset price collapse	Asset price collapse	Storms and cyclones	Severe income disparity	Severe income disparity	Income disparity	Interstate conflict with regional consequences	Large-scale involuntary migration	Extreme weather events	Extreme weather events
2nd	Middle East instability	Slowing Chinese economy (<6%)	Slowing Chinese economy (<6%)	Flooding	Chronic fiscal imbalances	Chronic fiscal imbalances	Extreme weather events	Extreme weather events	Extreme weather events	Large-scale involuntary migration	Natural disasters
3rd	Failed and failing states	Chronic disease	Chronic disease	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions	Unemployment and underemployment	Failure of national governance	Failure of climate-change mitigation and adaptation	Major natural disasters	Cyberattacks
4th	Oil and gas price spike	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises	Climate change	State collapse or crisis	Interstate conflict with regional consequences	Large-scale terrorist attacks	Data fraud or theft
5th	Chronic disease, developed world	Retrenchment from globalization (emerging)	Global governance gaps	Climate change	Water supply crises	Mismanagement of population ageing	Cyber attacks	High structural unemployment or underemployment	Major natural catastrophes	Massive incident of data fraud/theft	Failure of climate-change mitigation and adaptation

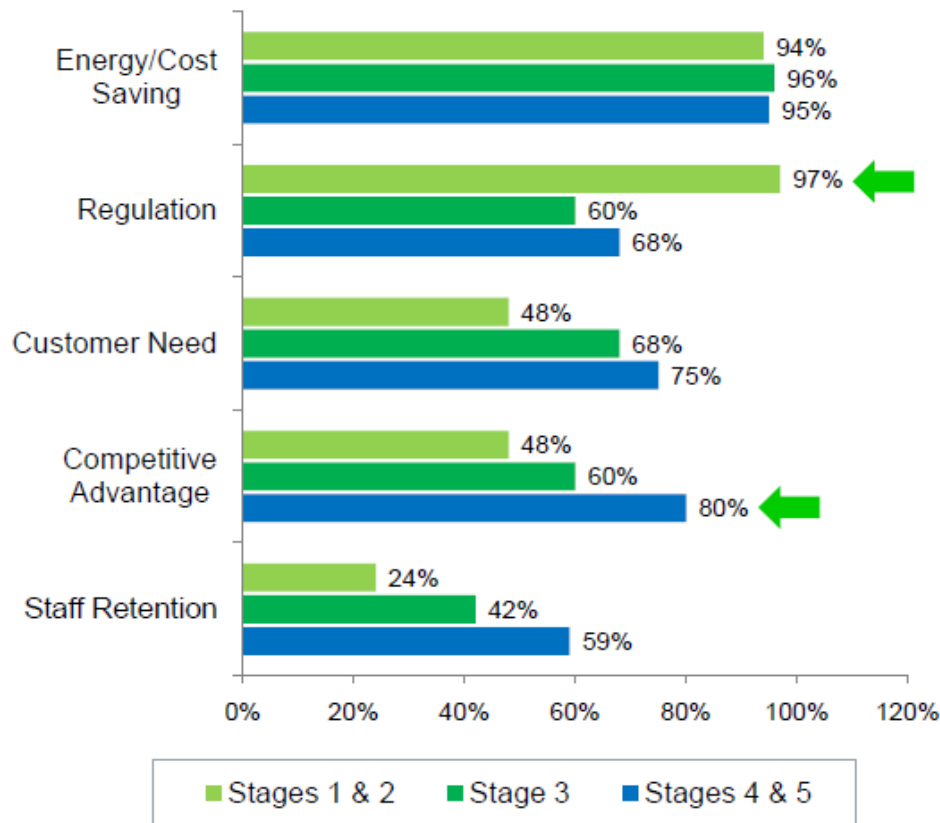
Top 5 Global Risks in Terms of Impact

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1st	Asset price collapse	Asset price collapse	Asset price collapse	Fiscal crises	Major systemic financial failure	Major systemic financial failure	Fiscal crises	Water crises	Failure of climate-change mitigation and adaptation	Weapons of mass destruction	Weapons of mass destruction
2nd	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Climate change	Water supply crises	Water supply crises	Climate change	Rapid and massive spread of infectious diseases	Weapons of mass destruction	Extreme weather events	Extreme weather events
3rd	Slowing Chinese economy (<6%)	Oil and gas price spike	Oil price spikes	Geopolitical conflict	Food shortage crises	Chronic fiscal imbalances	Water crises	Weapons of mass destruction	Water crises	Water crises	Natural disasters
4th	Oil and gas price spike	Chronic disease	Chronic disease	Asset price collapse	Chronic fiscal imbalances	Diffusion of weapons of mass destruction	Unemployment and underemployment	Interstate conflict with regional consequences	Large-scale involuntary migration	Major natural disasters	Failure of climate-change mitigation and adaptation
5th	Pandemics	Fiscal crises	Fiscal crises	Extreme energy price volatility	Extreme volatility in energy and agriculture prices	Failure of climate-change mitigation and adaptation	Critical information infrastructure breakdown	Failure of climate-change mitigation and adaptation	Severe energy price shock	Failure of climate-change mitigation and adaptation	Water crises

STAGES OF SUSTAINABILITY

Stage	Description	Key Attitudes
Stage 1	Green not part of the organization mission	View Environmental Initiatives as Costs
Stage 2	Green enters into the organization mission as it is legally required	
Stage 3	The organization considers the proactive application of Green to be consistent with the profit mission	Sustainability can save money
Stage 4	The organization transforms into a Green organization. Green is viewed more as an opportunity than a cost	Sustainability part of corporate strategy
Stage 5	The organization approaches business as a holistic, restorative company	

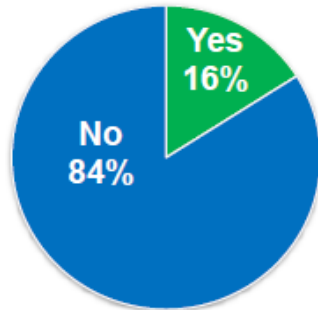
KEY DRIVERS



- On average, 81% Report that the Public is Expecting Sustainability from Corporate America - up from 66% in 2009
- All are driven by energy and cost savings...*but*
- Firms in higher stages also recognize importance of intangible metrics

SOFT BENEFITS

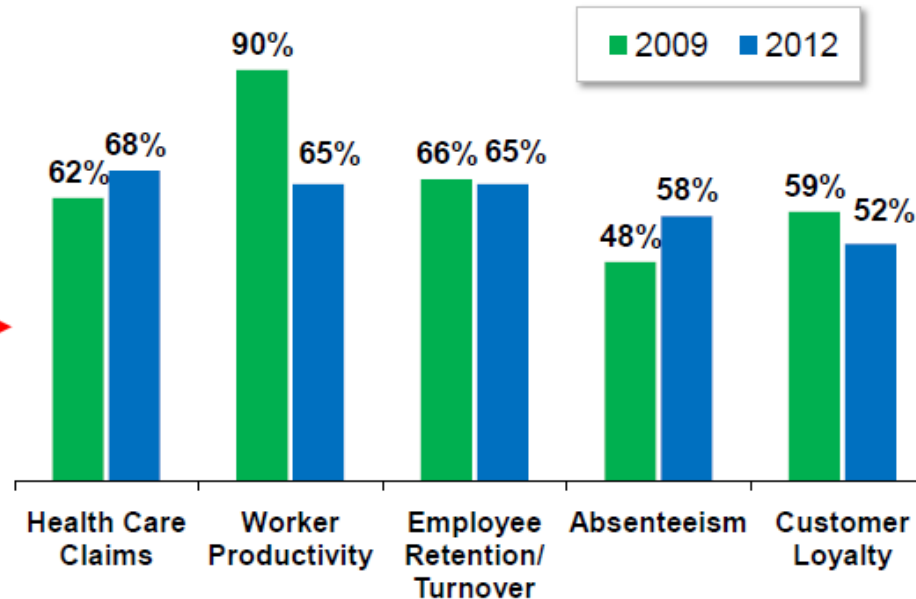
Currently Evaluate
Benefits with Soft
Measures



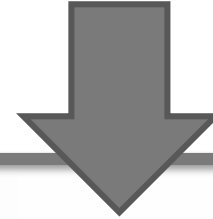
Similar use in 2009
(14%)



Soft Measures of Sustainability Used



ENVIRONMENTAL WASTE CATEGORIES



Water



Air



Solids



**Toxicity
(Chemicals)**



Energy



ENERGY

Energy Efficiency Projects:

- Immediate, monthly cost savings
- Quick ROI
- Repeating annual cost savings
- Labor/Maintenance Savings
- Environmental Emissions Reductions

SUBARU STANCE

"I think because of the years of kaizening and improving our equipment, it was a very easy transition into the environmental part of the business...Each manager has a goal for the environment that they must meet as a part of their performance review. It's also part of our management bonus program, that our overall corporate goals must be met with regard to the environment."

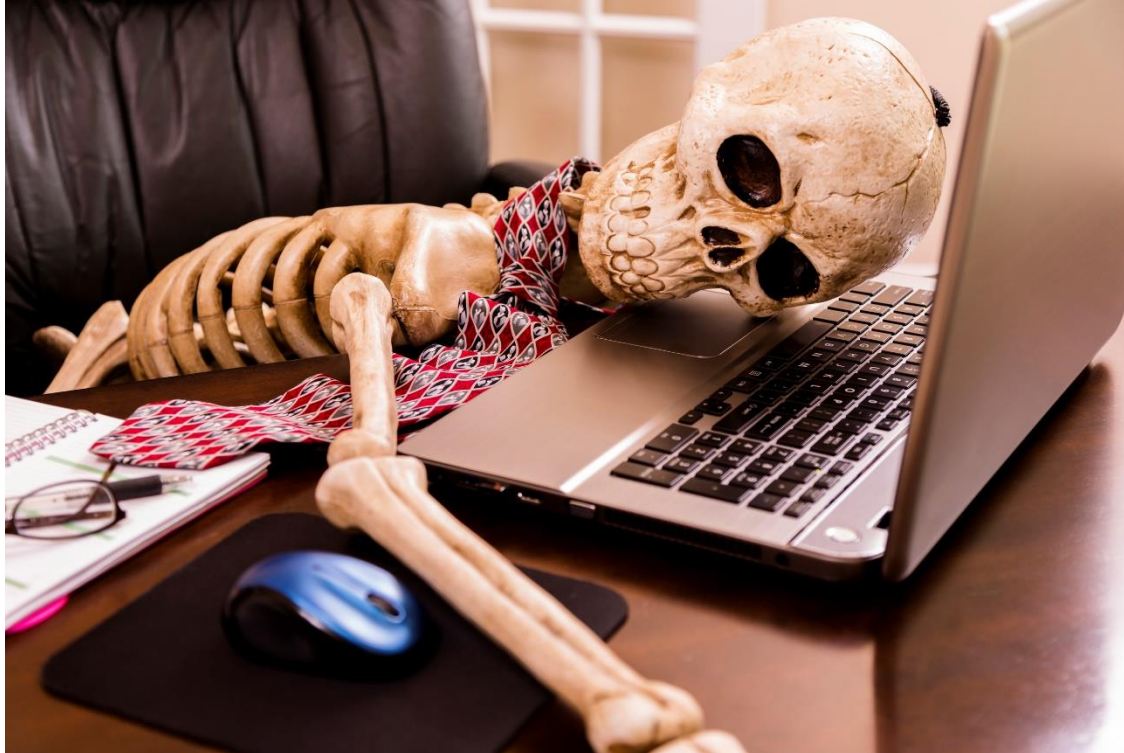
- Jim Myers, Subaru of Indiana Automotive

TOYOTA TAKE

"After all, anything we buy, we emit, send down the drain, burn in an incinerator or put into landfill, we pay for. If we can save it we will automatically contribute to our bottom-line. Therefore it has to make good business sense."

- Steve Hope, General Manager, Environmental Affairs and Corporate Citizenship at Toyota Motor Europe

WHAT ARE YOU WAITING FOR?



CONCLUSION

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