**Design with Nature, LLC**
Mitch Kennedy, ND, CEM, 6ΣBB
www.DesignwithNature.US
Telephone: (860) 255-8601
inquiry@designwithnature.us
Linkedin.com/in/mitchkennedy

# VIDEO TRANSCRIPT
## Corporate Sustainability Programs series:
## The Naked Truth - Part 2 of 3

1 -
Welcome back, I'm Dr. Mitch Kennedy, owner of Design with Nature. This is Part 2 of 3 in the "Corporate Sustainability Programs" series – **The Naked Truth** about the Emperor's New Clothes - what is **NOT** in 70% of all Sustainability Programs.

2 – The Usual Program Gaps
Design with Nature reviews many Sustainability programs and also benchmarks them against peers. We find 3 major "gaps." The first gap is Risk Ignorance & Liability.

3 – 1st Gap: Risk Ignorance
In the last 4 years fewer than 30% of the companies that report publicly on Sustainability progress have included Risk Analysis. Keep in mind, during that same time these companies have more than doubled the scope of data disclosed and also increased the use of impartial verifying bodies by 50%. Yet they are still NOT looking at risk! And I would think that any third party verifier worth their salt would push hard for risk disclosure due to the potential backdraft of liability if they didn't.

4 – Risk#1 - Supplier Outages
This first risk to your business is the loss of a supplier due to a climatic weather event. Toyota required 3 – 6 months to bring its suppliers back after the Fukishima earthquake. In the US, petroleum refining in the Gulf of Mexico slowed to a trickle following Hurricane Katrina. This hurricane immediately caused 600,000 people to be unemployed. Oil prices spiked to all-time highs, on fear of shortages, and gasoline prices in the Southeast increased by 50 – 100%.

5 – 2012 – Year in Review
The U.S. had 11 major storms in 2012 each causing $1 billion or more in damages. In the Fall of 2012 we also had our first "Super Storm" due to the combining of weather patterns. This Hurricane resulted in $45 Billion dollars in damages (not including economic loss) across New Jersey, New York and Connecticut. While there is no firm statistic yet, a good percentage of the

smaller businesses affected will close permanently. What if one of them was your supplier?

6 – Risk#2 - Supply Route Outages
If your company is in Colorado, the news of coastal hurricanes has little direct effect upon you, EXCEPT if the supply route for your materials is cut off. In this case your supplier may able to produce, but not get their products to you. What then?

7 –
The Louisiana and Mississippi ports receive 8,000 and 9,000 ships per year in foreign cargo commerce. If these ports are down for a month that would delay 700 – 800 vessels from delivering their products. This causes a backlog of inspections for US Customs, furthering the delay. Long term risk from sea level rise will only compound vulnerability, causing more flooding and permanently submerging some structures in low-lying areas.

8 – Risk#3 Energy Outages
Even if your suppliers' buildings and supply routes are undamaged, you could still lose electricity or fuel oil delivery. In the 2011 Halloween Nor'easter that hit New York & New England, businesses and residents were without power for up to 14 days.

You can see by the chart that the biggest increase in power outages is due to Hurricanes and windstorms. So how are you protected from power outages?

9 – 70%
So here's the "NAKED TRUTH" about the Emperor's New Clothes. Ethical Investment research Services, Ltd (EIRIS) revealed that 70% of the World's leading brands lack the policies and structure to change their risk profile regarding climate change. EIRIS goes on to warn investors that this will increasingly place the "brand" at risk of losses, and subsequent poor stock performance. In the 2 years since this study was released, the percentage has not decreased. Let me say that again – there has been NO movement on this issue.

10 – 2nd Gap - Commodity Vulnerabilities
On top of the risks to supply chain continuity, Commodity Price Fluctuations are the 2nd most-common class of risk to manufacturers. As mentioned before, hurricanes and winter storms increase both the speculative futures price of commodities (such as oil and natural gas) and the "at-the-pump" price (i.e. for gasoline and home heating oil). These events and other severe weather can also affect agricultural yields and their market prices.

11 –
As you can see by the chart, the average monthly price for crude oil ($15 to $25/barrel) was pretty stable throughout 1989 – 2002. Then speculation and a number of supply constraints drove the price to record highs of over $130 /

barrel. The global recession in 2008 cratered the price. BUT notice after that, the price remained at more than double the pre-recession average. Currently the price has more than doubled again from $45 to $ 121 / bbl at the end of 2011. How did this affect your business? Is it still affecting you?

12 – What Happened Last Time?
I'll tell you who WAS affected by this, plastics manufacturers. In the US, natural gas is the primary feedstock, but plastics manufacturers price was closely tied to crude oil at the time. Also any extra capacity in petroleum refining is used to create the most profitable distillate (gasoline at the time) instead of propane (a feedstock for plastics.) As a result resin prices rose dramatically. Then transport costs rose too. All of this put the squeeze on plastics companies globally. Luckily the demand for oil dropped due to the recession.

13 – Tea Leaf Production
India is the world's #2 tea producer. In 2012 the country produced 991,000 tons, (roughly 22% of world supply.) However, since 2007 there has been an 18% decrease in production, (100,000 tons)! Increasing temperatures in these sensitive regions have changed rainfall patterns, increased pest outbreaks, and shortened dormancy periods of fungi. This has caused harvests to decrease by 18% from 2007 to 2010. Many US tea companies buy leaves from this region.

14 – Questions to Answer
So in closing this part of the talk, we have 5 questions relating to Sustainability and Risk:

- Who are your stakeholders and collaborators?
- Are your suppliers addressing their climate risks?
- Do you operate in, or source from, or travel through areas that are considered climate "hotspots"?
- How can you create redundancy in your energy supply?
- Where are the information gaps?

We feel this is a critical set of questions to reduce risk exposure and secure your supply chain. Is there someone within your organization to do this analysis for you? If there is, that's great – get to it. But if your team needs a little help getting started, some training, or if you need someone to manage the project, or do the whole thing, please give me a call!

The 3rd program gap will be explained in Part 3 "The Opportunity for a New Suit".