Sustainability

A 21st Century American Grand Strategy

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http://weatherhead.case.edu/centers/strategic-innovation/
“The cause of America is in a great measure the cause of all mankind.”

Thomas Paine, *Common Sense*
Why grand strategy?
Why grand strategy?

The Concept
Why grand strategy?

The Concept

The Construct

American Grand Strategy

The alignment of:

our economic engine, our governing institutions, and our foreign policy to solve the great challenge of the era
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American Grand Strategy

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The Challenge...

...Global Unsustainability
# A New US Grand Strategy

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\[
\text{Demand} + \text{Excess Liquidity} - \text{Stranded Assets}
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The Opportunity...

Walkable Communities

Regenerative Agriculture

Productivity Revolution

...an historic, grand opportunity.
The Logic…

Walkable Communities
Regenerative Agriculture
Productivity Revolution

Source: Report to the President on Capturing Domestic Competitive Advantage in Advanced Manufacturing, July 2012
The Logic…

Turning demand into **prosperity** and **security**…

...for future generations

Source: Report to the President on Capturing Domestic Competitive Advantage in Advanced Manufacturing, July 2012
The Framework...Idea to Action

Economic Strategy Task Force

U.S. Economic Policy:
- Walkable Communities
- Regenerative Agriculture
- Resource Productivity
- Excess Liquidity
- Stranded Assets

Financing for the 21st Century


CWRU's Strategic Innovation Lab

Regional Economic Clusters
Alternative Growth Scenario…A New Economic System
The Design...Main Street Prosperity & Security
Lake Erie Crescent…The Example of Cleveland

Advanced Materials Development Group
Solving Hydrocarbon Stranded Asset Problem

Affordable Passive Housing Initiative
Meeting demand and creating demand

Cuyahoga County Clean Energy Finance Hub
Leveraging Private Sector Capital

Institutional Purchasing Power
Creating demand, leveraging up to $1B
Full-Spectrum Sustainability...

...getting to a “good place.”
What world is she going to see?
We the People
There is no reason good can’t triumph over evil, if only the angels will get organized along the lines of the mafia.

Kurt Vonnegut
Leading by Example
Smart Growth at Home; Smart Power Abroad
Today’s California: Position vs Momentum

The Good Stuff: Wind in the Sails…

• World’s 7th largest economy (north of $2.2T)
• Renewable Energy; 20th in energy-related GHG emissions (2nd lowest carbon intensive economy in the world)
• Increasing diversity
• CA leads US in ag, technology and manufacturing revenue growth
• Average 15% return to investors (vs 12% nationally)
• 2014 Per-capita income up $1700 to $50,338
• $5B budget surplus
• Manufacturing value up 8% to $204B (2012)
• CA ag revenue = $21.4B (2012) - 3 x more than second-ranked Iowa’s $6.8B
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…but where are we going?
Some Hard, Scary Numbers:

• Current global energy consumption = 16 Terawatts (TW)

• 3B more middle class by 2050 = add’l 18 TW needed (Total global requirement = 34TW)
  *Assumes German consumption rate and remainder of developing world consumption remains static

• Global population = 8B by 2025 – If global average per capita consumption is 4kW, global requirement is 32TW

This is only 10 years from now…
...how to meet demand and not burn our way to extinction?

Source: Nov 2014 Article, “Sobering Numbers” by Bruce Dale, Professor of Chemical Engineering, Michigan State University
Security on Main Street
Security on Main Street

Gaza
Security on Main Street

Gaza

Homs, Syria
Security on Main Street

Gaza

Homs, Syria

Fallujah, Iraq
Security on Main Street

Gaza

Homs, Syria

Fallujah, Iraq

Greensburg, KS
Security on Main Street

.1% civilian death rate (Aug 2014)

Gaza

.1% civilian death rate (May 2014)

Homs, Syria

.4% civilian death rate (Nov 2004)

Fallujah, Iraq

1.4% civilian death rate (May 2007)

Greensburg, KS
Lesson Learned…

Mother Nature doesn’t care about rules of engagement.