Warnings, Celebrations and Key Opportunities:

Creating Explosion instead of Implosion of the Green Economy

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What are we trying to create?

The triple bottom line of sustainability:
Triple Bottom Line of Sustainability
What are we trying to create?

Economics as if people and the planet matter

E.F. Schumacher
Education for a Sustainable Society:

“enables people to develop the knowledge, values and skills to participate in decisions …, that will improve the quality of life now without damaging the planet for the future.”
Sustainable Communities

Public Choices and Behaviors-Laws

Private Choices and Behaviors-Habits

Applied Knowledge/Technological Skills

Sustainable Economies

Ecosystem
Let’s start with celebrations

- Many businesses, faith institutions, military, 680 college and university presidents and 50 youth organizations are calling for a sustainable future - youth telling us “You are messing with our future and we want action” – (e.g. Energy Action Coalition, Sustainable Endowments Institute)
- Money for curricula/labs/training opportunities e.g. ARRA money, Green Jobs Innovation/Solar Train the Trainer network/instructor training from www.ceret.us/trainer and others/new DOE training site trainingportal.ee.doe.gov,
- Hundreds of new educators and thousands of new systems being installed
- Extension of federal tax credits (with bipartisan support)
Let’s start with celebrations

- State policies - 40 renewable portfolio standards in the states (http://www.dsireusa.org/summarytables/rrpre.cfm) and feed in tariffs gaining ground – making the economics work

- Mainstream educational organizations (American Association of Community Colleges) involved and working with good groups like IRECUSA and NABCEP

• We old time renewables people are still alive to see it happen!
Warnings

- Education money out first, simultaneous with the economic mortgage and financing troubles,
- Some lag in job placements (don’t panic or run away!)
- Still sometimes selling efficiency and renewables door to door like Avon ladies or Fuller brush men
- Often having to pay the whole price for the renewables system versus a small monthly payment to participate in a coal plant/natural gas system
- We are still smaller in power than fossil fuels lobbyists in state and federal legislatures
Key Opportunities to Create Explosion Instead of Implosion

U (you) Can Build a Sustainable Economy

1. Use Available Resources
2. Change outdated fossil fuel based Policy
3. Build Market Demand
4. Support the Growth of Your Local Businesses: Help Them Go Green
5. Enhance Job Placement

YOU and YOUR FELLOW EDUCATORS and COLLEAGUES HAVE A UNIQUE AND IMPORTANT ROLE TO PLAY IN THESE 5 OPPORTUNITIES!!! WE CAN’T CREATE THE SUSTAINABLE GREEN ECONOMY WITHOUT YOU!!!
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Resources for you

• Sustainable Education Handbook and Renewable Energy Success Stories in Michigan workbook, both at http://www.michiganenergyoptions.org/education
• Concept maps that link to standards and learning activities - http://strandmaps.nsdl.org/?id=SMS-MAP-2122
• http://climate.nasa.gov/esw2010/EnergyEssentials/
• Funding career pathways toolkit for out of school youth - Center for Post Secondary and Economic Success released a Toolkit for States to Identify and Pursue Federal Funding Opportunities for Creating Career Pathways and Career Pathway Bridges http://org2.democracyinaction.org/dia/track.jsp?v=2&c=L9bsitF1STRR11QITkR1iQU51ppMg%2BLM
• Energy Education and Workforce Development educational resources from DOE http://www1.eere.energy.gov/education/lessonplans/default.aspx
“Sustainability Education and Economic Development” online resource center open to all from the American Association of Community Colleges – www.theseedcenter.org – submit your resources too!

- Topics: Solar, Wind, Energy Efficiency, Green Building and Sustainability Education! More to come (e.g. water, food)

For each of the above:
- curricular materials,
- employment projections,
- skills/competencies/industry standards
- Innovative partnerships to grow your local green economy and place your students
- success stories and wiki to share with each other
- components of a quality green education program/classes/certificates
- upcoming policy toolkit
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Key Opportunities to Create Explosion - POLICY

• **Understand** the formal and informal power structures regarding energy in this country: fossil fuel influences, federal and state policy, regulation of utilities that are supposed to serve us! We can change this.

• **Engage others** in policy advocacy.
  Make democracy work for people!
  Who to engage?
  Governmental relations/president’s office at your organization, students and the public! (Already energized: military, youth, faith, many businesses, much of higher education and K-12)

• **You** can reach out to all of them via sustainable community sessions!
Policy and Financing/Cash Flow - Civic Engagement is Crucial – Take Notes!
Right now Perkins is at risk too

- Efficiency First - www.efficiencyfirst.org/policy/
- American Council for an Energy Efficient Economy - www.aceee.org/
- American Wind Energy Assn smart briefs – email grassroots@awea.org
- Use these organizations in your curricula, in your public events, in your use of the media and in your business relationships
One example – easy for all educators

- **Eight-Minute Activist Program** - At no expense to you, AWEA will supply your company with cards that are designed to quickly explain a legislative issue, why the issue is important, and how to take action.

- **District Meetings Program** - AWEA will set up meetings for you or your students to visit your Members of Congress or their staffs at one of their local offices to discuss wind energy issues. AWEA will provide you with the talking points and fact sheets for your visit.

- Please email grassroots@awea.org

- We can set up video interactions with your elected representatives – key activity – contact me about it!

- At one college, 3 student calls changed a senator’s vote!
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Don’t wait for the employers to ask for your students. Target seminars for businesses such as “Build Your Business and your Profits By Going Green and Sustainable”.

Go out and educate the community to build demand for products and increase sales. These same efforts will build increase job placements and help change policies to create a green, sustainable economy.
Assistance for your businesses!

- Energy Efficiency – **Home Performance Resource Center**


- NABCEP and IRECUSA – selling renewables!
Key Opportunity – Build Market Demand

- Educators get free media: TV, Cable Access, Radio, Internet – use it regularly!!

- Show public efficiency and renewable energy systems working, push the value of weatherization and renewables

- Share the easy steps with public, chambers of commerce, local government, non-profits and contractors: how to get an energy audit, get your building weatherized and install renewable energies
The lab and the school can also be a community demonstration center for sustainability.
Key Opportunity – Build Market Demand

- Work with your state energy office, the Dept of Energy and the SEED center resources www.theseedcenter.org to educate your businesses and your community –e.g. Green For All Retrofit America's Cities: Programs Designed to Perform Energy-Efficiency Retrofits at a City-Wide Scale

- Teach your students sales and entrepreneurship - how to convince HVAC, electrical contractors, small businesses, govt and non profits to start their green divisions/products/practices. Not the same old Advisory Committee.
Don’t feel you know enough? Think you are already too busy?

If we don’t do it, we risk implosion instead of explosion!!

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GREAT NEWS – WHEN WE DO # 1, 2 and 3 above, 4 and 5 happen too!
The Pervasiveness of Green

• Be clear about two items: we must get off of fossil fuels asap, and going green grows the economy.

• If you don’t know the above, become more literate about energy and pollution problems/solutions. www.earth-policy.org

• Jobs? Every job has a green tinge to it, since energy waste, toxins, food chain disruption, ecosystem destruction, and human rights violations are costly, unacceptable and unnecessary.

• SOC listings are incomplete, although nearly 900 distinct green occupations are identified SO
We need energy and sustainability literacy and engagement in solutions in every course and every discipline. Many precedents and resources to assist you:

1. Association for the Advancement of Sustainability in Higher Education – resource center
2. U.S. Partnership for Education for Sustainable Development – curricular/professional development resources K-12 and higher education
4. Disciplinary Associations Network for Sustainability – [www.aashe.org/dans](http://www.aashe.org/dans) - great resources for multiple academic areas
5. Faculty/staff development sessions for you organization.
For higher education, Sustainable Development integrated into:

- Curricula
- Civic Engagement
- Operations
- Purchasing
- Student Life
- Professional Development
- Mission and Planning
- Community Outreach and Partnerships
KEY THRUST

Change norms so all students and the community become:

• environmentally responsible
• socially responsible
• economically responsible

Creating sustainable abundance and higher quality of life
Key places to place sustainability and institutionalize it. Start a Sustainability Committee on campus – fun stuff:

- Mission
- Strategic Plan
- Budget
- Orientation
- Campus Map and Signage
- Policies
- Operations and Purchasing Policies
- Student Life
- Infused throughout curricula
- First Year Experience
- Gen Ed Core
- Curricula Review
- Community Partnerships
- Workforce Development
Key Curricular Approach – Real World Problem Solving

• Energy Audits/ Efficiency on Real Buildings
• Solar Hot Water Heaters (Built From Low Cost Materials if no $) Installed on High Profile Community Buildings
• Community Wind Projects
• Greening Your Local Chambers – work with us!
• Community Energy Efficiency Campaigns
• Involve Others, Enthusiasm is Contagious
• Efficiency Community Block Parties
• Activities/Centers in Sustainable Living

• **Online match making website for projects customized for you!!!!**
The Power of What You Do

• We can choose a sustainable future
Congratulations for all you have done!!

Congratulations for all you will do in the future.

Let your enthusiasm show!

For more information, contact me at
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