



# Bio-products Sustainability, a University Cooperative Center for Excellence in Education\*

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\*BioSUCCEED



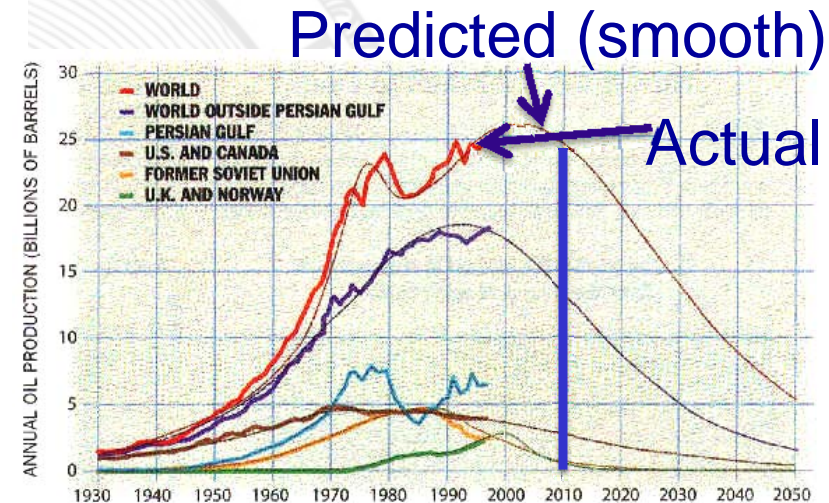
# \* Objectives \*

- ✓ Provide the first national overview of our USDA-sponsored teaching & research program in biomass & bioenergy
- ✓ Obtain your feedback on its value (website, 10 question survey using "clickers," and e-mail correspondence: [biosucceed@ncsu.edu](mailto:biosucceed@ncsu.edu))



# Some background...

- In 2006, President Bush laid out a vision for the production of “bio”-energy
  - A critical confluence of science & policy
  - He called for renewable resource exploitation and self-sufficiency
- We assembled *BioSUCCEED* in the wake of that historic moment
  - A Southern *Triumvirate* was assembled: NCSU, NCA&T, UT-AC
  - Each has great strengths in biomass & bioenergy training, education, research, and extension

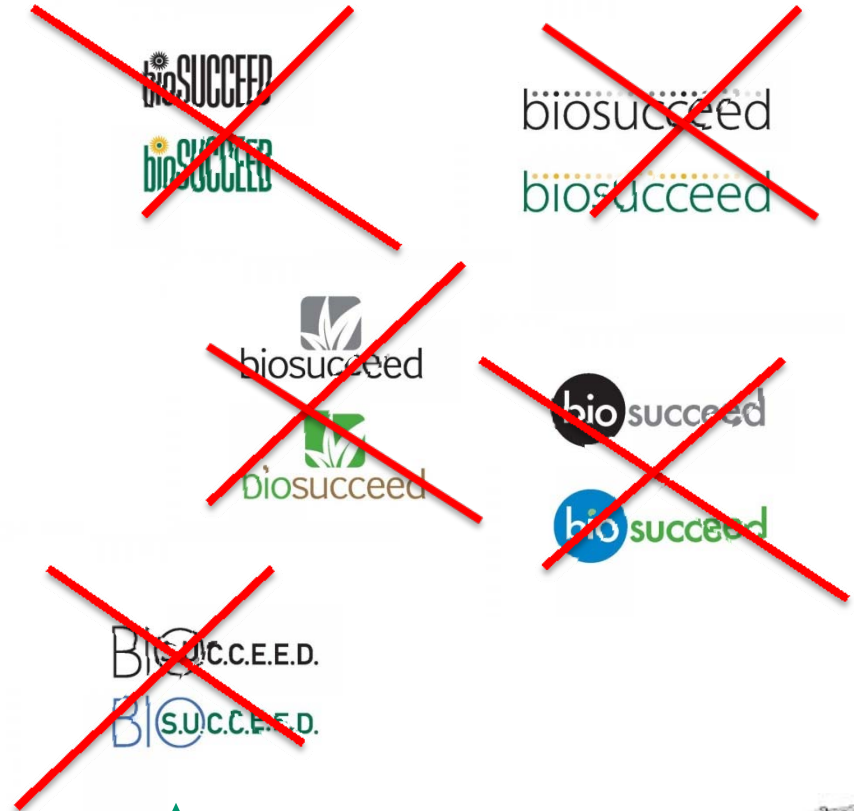


Shown above is “Hubbert’s Peak” – a geological assessment (1956) of *Annual Oil Production vs. year*



# What is *BioSUCCEED*?

- Acronym: **Bi**oproducts **S**ustainability, a **U**niversity **C**ooperative **C**enter for **E**xcellence in **E**Ducation
- A virtual teaching & training Center located at: [www.biosucceed.com](http://www.biosucceed.com)
- Addressing the biomass changes going on at the grass roots level



# Specifically, what does it do...?

- It is a platform for the fundamentals & latest knowledge in biomass & bioenergy
- It distills the work we have been doing in teaching & research into discrete modules for consumption
- We intended it to be an open-access, modular array of slides for use in academics, industry, government, and private settings



# What does it contain???

- Biomass Fundamentals
- Characterization
- Biological Processing
- Thermal Conversion  
(coming soon)
- Solid-State Composites
- Life Cycle Analysis



# What were the mechanics to *Succeed*?

- Visits among Universities & monthly update/progress meetings
- Coordination of work output within the six (6) courses developed: outlines, laboratories, research exercises, new teaching tools, & papers/publications
- Central website ([www.biosucceed.com](http://www.biosucceed.com))
- Development of survey
- Conferences & reports



# Biggest problems & solutions

- Involvement of people
- & Feedback
- First: post-assessment intervention survey – too DIFFICULT to do well (anecdotal information is what we want)
- Second: getting surveys completed is a losing proposition; we elected to do it at Conferences and with targeted groups (USP, classes)
- Facebook:  
<http://www.facebook.com/group.php?gid=396008630920>
- Blog:  
<http://biosucceed.blogspot.com/>
- Survey:  
<http://www.surveymonkey.com/s/ZMNRQXL>



# In conclusion, what did we learn?

- This area is FUN, HIGHLY USEFUL, and makes a DIFFERENCE in people's lives
- We wrote some cool papers on the work we have been doing that teach a lot about biomass (<http://www.ncsu.edu/biosucceed/why.html>)
- For example, we were invited by *Chem. Rev.* to discuss work in cellulose nanocrystals (this journal gets a lot of citations, *ergo*, influence)
- Working together is a great way to develop a synergy and momentum



# Finally, for our “CAPTIVE” Audience: SURVEY!!! YEAHHHH!!!

Here we will use clickers for our survey:

<http://www.surveymonkey.com/s/ZMNRQXL>

Please use the clickers that have been distributed to you earlier to take this survey – THANKS!!!



**Thanks for your attention!**

**Please write to us:**

**[biosucceed@ncsu.edu](mailto:biosucceed@ncsu.edu) with**

**your questions, comments,**

**concerns, advice, and**

**suggestions...**

